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REAUTHORIZATION OF U.S. CHILD NUTRITION PROGRAMS: OPPORTUNITIES TO FIGHT HUNGER AND IMPROVE CHILD HEALTH

HEARING

BEFORE THE

COMMITTEE ON AGRICULTURE, NUTRITION, AND FORESTRY
UNITED STATES SENATE

ONE HUNDRED ELEVENTH CONGRESS

FIRST SESSION

NOVEMBER 17, 2009

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REAUTHORIZATION OF U.S. CHILD NUTRITION PROGRAMS: OPPORTUNITIES TO FIGHT HUNGER AND IMPROVE CHILD HEALTH

Tuesday, November 17, 2009

United States Senate,
Committee on Agriculture, Nutrition, and Forestry,
Washington, DC

The committee met, pursuant to notice, at 10:30 a.m., in Room 562, Dirksen Senate Office Building, Hon. Blanche Lincoln, Chairman of the committee, presiding.

Present or submitting a statement: Senators Lincoln, Harkin, Stabenow, Brown, Casey, Klobuchar, Bennet, Gillibrand, Chambliss, Lugar, and Grassley.

STATEMENT OF HON. BLANCHE L. LINCOLN, U.S. SENATOR FROM THE STATE OF ARKANSAS, CHAIRMAN, COMMITTEE ON AGRICULTURE, NUTRITION, AND FORESTRY

Chairman Lincoln. Well, good morning to everyone, and I hope the sky doesn't fall because I am starting early, which is unprecedented for me.

[Laughter.]

Chairman Lincoln. Unprecedented for me. I was waiting on our colleague, Senator Chambliss, and I know he will be joining us shortly, but I think I will go ahead and begin so that we can move forward.

But good morning to everyone. We welcome you all to the Senate Agriculture Committee, where today we will continue a series of hearings begun by my predecessor, Senator Tom Harkin, in anticipation of the reauthorization of the Federal Child Nutrition Programs.

We are honored today to be joined by two very distinguished panels of witnesses, including Secretary of Agriculture Tom Vilsack and a panel of experts from my home State of Arkansas.

We undertake this task at a very difficult time. Just one week before Thanksgiving, as we all reflect on the many blessings in our lives, we are reminded of the tremendous need that exists across our great country. I know as a child, a farmer's daughter, and looking out at the field, realizing the plenty that existed and also realizing the need that existed in the community that I grew up, in East Arkansas.

Just yesterday, the Department of Agriculture released its annual report on hunger and food insecurity. The technical terms that USDA uses in this report are low food security and very low food security. But folks, we have got to be honest with ourselves and honest what that really means. It means that these are families that are either hungry or a meal or two away from being hungry.

This report highlights the seriousness of the child nutrition bill that lies before us. According to the USDA, in 2008, 16.4 percent of all individuals, just over 49 million people, experienced hunger or were at risk of hunger at some point in time during the prior year. This is an increase of nearly 13 million people over a year. Never before in the history of this survey has this country experienced increases of this magnitude.

For our most vulnerable citizens, our children, the story is even worse. For those of us that have young, growing children who come in from school or soccer practice and look up at us and say, “Mom, I am starving,” and we reach to the cupboard and find a healthy snack, an apple or a banana or maybe a breakfast bar of some sort, we look into their eyes and realize that they are satisfied and that we have done our best job.

But we also have to put ourselves into the shoes of mothers who don’t have that opportunity, whose kids come in and say, “Mom, I am starving,” and a mom who loves her children just as much as I love mine has to look into those eyes and realize that there isn’t something nutritious to feed their children, or maybe nothing at all. That is what we are here to talk about today.

Twenty-two-point-five percent of families with children were at risk of hunger in 2008, up from 16.9 percent in 2007. Rates were also markedly higher than the national average for single parents and black and Hispanic households. I am also sad to report that my home State of Arkansas now has the third highest rate of hunger in the country. Fifteen-point-nine percent are at risk.

These grim statistics add a note of seriousness to these hearings that we hold today, but they also lend a sense of purpose for what we have to do. The task before us is not just a routine exercise. We do not undertake this simply because the reauthorization expires, but because people across this country are sorely in need. We go forward on this reauthorization because people across this country are suffering and because we all have a responsibility to act.

I look forward to hearing from our witnesses today about how this committee can carry out its responsibility in this regard, especially in light of the new USDA report. But before we do, I would like to outline three priority areas that I think can serve as guiding principles for the reauthorization before us.

First, we must take steps to ensure that all children eligible for Federal Child Nutrition Programs are actually receiving them. The number of children that are eligible and unenrolled is astonishing. Despite the fact that programs such as the School Lunch and School Breakfast Programs have been around for decades, there remain many children who could be participating but do not. A critical part of what we have to do is to ensure that they can access these programs and that they do.

Second, we must improve the nutritional quality of the meal benefits provided through our Child Nutrition Programs. Ensuring that children have enough to eat should be a hallmark of a fundamentally decent society. But with obesity and diabetes and nutrition-related chronic diseases epidemic among us, we must not stop at just filling their bellies. We must also take steps to provide foods that nourish and promote the development of our children. Not only does it make sense in terms of quality of life and what it is we are trying to provide, it also is cost effective. Think of their abilities to have better health care down the road with more nutritious meals and exercise. Think of what it means in terms of their learning capacity and their abilities to learn in school and excel to their greatest of potential.

Third, we must modernize and improve the integrity of Child Nutrition Programs. We have a WIC Program that, for the most part, still relies on paper coupons even as most of our Federal programs, like the SNAP Program, have entered the electronic age by transitioning to electronic benefits. Even my mother got rid of her rotary dial telephone. We have got to move forward.

In the School Lunch Program, elementary school children carry paper applications in their backpacks, and then we wonder why some applications never make it back to school. Folks, I clean out those backpacks once a night. They are full of paperwork and all kinds of things, whether it is homework that has been there and back again or whether it is multiple pieces of paper that children are sent home with for authorization from parents to walk-a-thons for the homeless to a number of other things. Some of them never reach parents. Some of them never make their way back to school. These are the circumstances that prevent our children from receiving those School Lunch benefits. Surely we can do more to bring these programs into the 21st century, with benefits for both children and for program operators alike.

With these principles in mind, I look forward to the testimony of our very qualified witnesses today. I look forward to building upon the good work that this committee has already done under the leadership of Senator Harkin and Senator Chambliss and along with their incredibly capable staff and our incredibly capable staff today who continue to work on this issue with great passion and certainly with great energy in moving us forward.

I would like to now, if it is appropriate, yield to my good friend and colleague from Georgia, Senator Chambliss.

STATEMENT OF HON. SAXBY CHAMBLISS, U.S. SENATOR FROM THE STATE OF GEORGIA

Senator CHAMBLISS. Thanks very much, Madam Chairman, and thanks for holding this hearing. I would like to join you in welcoming Secretary Vilsack back to our committee. Tom, it is great to see you.

I am pleased we will have the opportunity to hear from the administration about its priorities for reauthorization of Child Nutrition Programs. Our country is fortunate to have a strong nutrition safety net comprised of 15 different Federal nutrition programs, but it is important that Congress reexamine them on a regular basis to make sure they are as effective as possible in serving Americans in need of nutrition assistance.

Due to the current economic downturn, we are seeing unprecedented levels of participation in Federal nutrition programs. Over

36 million people are currently participating in the Supplemental Nutrition Assistance Program each month, which is the highest number in the program's 40-year history. In my own State of Georgia, we have seen participation increase to over 1.4 million Georgians, which is almost 15 percent of the State's population, and Mr. Secretary, I am going to be curious to hear how that corresponds to other participation around the country, because I am sure there are unprecedented levels at which we are seeing in all 50 of our States. The fact that the SNAP program can swiftly serve those in need highlights one of the program's key features: The fact that it can easily expand and contract as economic condition change.

Schools are also realizing increased participation in the National School Lunch and Breakfast Programs, with expenditures for 2010 likely to exceed $16.8 billion. The caseload for the Women, Infants, and Children Program is also expected to rise, and I am pleased that the 2010 Agriculture appropriations bill funded the program at $7.25 billion to meet the potential demand.

I look forward to hearing from today's witnesses. We all agree that our Federal nutrition programs are not only important tools to combat hunger in the United States, but also effective tools to promote a healthy lifestyle and combat obesity.

Regarding the National School Lunch and Breakfast Programs, the Institute of Medicine recently released a report with specific recommendations to USDA on how to update the nutritional requirements of the meals, calling for more fruits, vegetables, and whole grains. I look forward to USDA issuing a proposed rule on how best to implement the IOM's recommendations to ensure that school meals meet the dietary guidelines for Americans.

It is important to recognize the progress many schools have made since the 2004 Child Nutrition Reauthorization to improve the quality of meals served throughout the National School Lunch Program, as well as the nutritional environment throughout school campuses. Partnerships between schools, food companies, and the public health community have demonstrated various approaches to offering healthy foods in schools as well as increasing physical activity opportunities.

One specific example is the Clinton Foundation's partnership with the Alliance for a Healthier Generation, which has effectively helped thousands of schools across the country create environments where physical activity and healthy eating are accessible and encouraged. We need to acknowledge the investment of time and resources in making these changes, as well as recognize that a one-size-fits-all approach may not be in the best interest of our schools or our children.

Another program that I want to applaud is USDA's Healthier School Challenge. I am very pleased that Secretary Vilsack recently announced that the Challenge will now be open to middle and high schools. Three Burke County public schools in Georgia recently achieved the goal level of the challenge, and I am impressed with the dedication of the School Food Service Director and school leadership for their commitment to ensuring a healthy and nutritious school environment.

Again, Madam Chairman, thank you for holding this hearing. I look forward to the input of today's witnesses as we move forward with the reauthorization of the Child Nutrition Program. Thank you very much.

Chairman LINCOLN. Thank you, Senator Chambliss.

We would like to welcome to the committee Secretary Vilsack. I note that he is joined by two other Iowans today on the committee, so we have got the whole State well represented, and that is a good thing. I would just like to say how much we appreciate Secretary Vilsack and all of your leadership as a past Governor, without a doubt, but also from my standpoint, the unbelievable passion that you have for rural development, particularly coming from your roots in small communities in which you provide a great leadership.

So we are delighted to have you here. I don't think there needs to be much more introduction, other than the fact that we look forward to working with you on really this very big challenging issue to us and to our nation. Thank you, Mr. Secretary, for being here.

STATEMENT OF HON. TOM VILSACK, SECRETARY, U.S. DEPARTMENT OF AGRICULTURE, WASHINGTON, DC

Secretary VILSACK. Madam Chair, thank you, and to Senator Chambliss and the members of this committee, thank you for the opportunity to discuss the pending reauthorization of the Department of Agriculture's Child Nutrition Programs.

One of the first items that President Obama discussed with me when I was first selected for this job was that one of his top priorities for USDA was to provide children with healthier, more nutritious meals. I pledged then and continue to uphold that pledge that USDA will do everything it can to support the health of our children and the health of the school environment in thousands of schools across the country.

The upcoming effort to reauthorize the Child Nutrition Program is a major opportunity for us to advance a number of key priorities for our children, and I appreciate the chance to appear before this committee to discuss the need for this legislation and some of the administration's key priorities.

The reauthorization of the Child Nutrition Programs presents us with an important opportunity to combat hunger, to improve the health and nutrition of children across the nation, and to enhance program performance. The scale of these programs means that reforms can have a major impact on tens of millions of school children. For instance, the National School Lunch Program serves 31 million school children in more than 102,000 schools across the country. The School Breakfast Program is available is over 88,000 schools and serves 11 million children on a daily basis. In addition to the National School Lunch Program and School Breakfast Program, the authorities to operate the Summer Food Service Program, the Child and Adult Care Food Program, the Special Milk Program, and the WIC Program all come up for renewal this year.

The Obama administration takes this opportunity very seriously. In the fiscal year 2010 budget, the administration proposed an historic investment of $10 billion in additional funding over ten years. The problems that we face and are challenged today to address through this reauthorization process are significant and critical to the future of this country.

At the same time, we are facing a continuing problem for some families being able to provide their children with enough to eat. As the Chair indicated, yesterday, the Department released a sobering report entitled, "Household Food Security in the United States 2008," showing that in over 500,000 families with children in 2008, one or more children simply did not get enough to eat. They had to cut the size of their meals, they had to skip meals, or even go whole days without food at some time during the year. This is simply unacceptable in a nation as wealthy and as developed as the United States.

This legislation is an opportunity in one stroke to confront both the challenges of obesity and hunger, with the prospect of better health and well-being for our children in the years to come. Investing in meal quality and access to these critical programs will help support the capacity of our young people to learn and acquire the tools necessary to become the leaders of tomorrow.

We can improve access to meals and explore new ways of empowering communities to reduce food insecurity and hunger, especially among children. We can make every school a place where nutrition and learning shape the food offered by improving food standards, eliminating foods that do not support healthy choices and expanding physical activity opportunities.

We can help pregnant women, new mothers, and the youngest children receive the support they need for optimal healthy starts and supporting working families using child care by providing nutritious food for their children and help them deal with the challenges of today's economy.

Beyond these food security, nutrition, health, and learning objectives, the reauthorization is an important opportunity to promote economic development and a robust farm and food economy. The Child Nutrition and WIC Programs are significant outlets for the bounty of American farmers and ranchers. Each year, USDA purchases approximately $1.5 billion of healthy foods through its Commodity Distribution Program. These purchases help support the entire agricultural value chain, from growers to packers, shippers, manufacturers, to retailers.

The legislation is critical, not only for the nutrition, but for health promotion, educational opportunity, and economic development. For these reasons, I want to share the Obama administration's top priorities for this legislation and express my commitment to work with this committee to pursue a robust reauthorization that advances these key priorities.

There are two main priorities that I will briefly discuss this morning, reducing barriers and improving access, and enhancing the nutritional quality and health of the school environment. Improving program performance is also important to us, and we will be attentive to that goal throughout the reauthorization process.

For many children in our programs, school lunch and breakfast represents the only healthy food they may eat all day. We must work to ensure access to nutrition assistance for children when and where they need it, particularly during the gap periods when we know children struggle to receive the nutrition they need, during the summer months, during breakfast, and in after-school environments.

We also need to expand the School Breakfast Program. Healthy days begin with healthy breakfasts. Many teachers report that they can tell which of their children started the day with a healthy breakfast and which did not. While 100,000 schools offer lunch, only 88,000 offer breakfast, and about one-third as many children receive school breakfast as participate in the lunch program on an average day.

To increase the number of schools offering breakfast and the participation of children in the program, we need to look for ways to support improvements in the nutritional quality of the school breakfasts, as well. To expand participation in school meals more generally, we must find and test innovative approaches and determine their effectiveness in addressing hunger among children, including modifications to accounting and claiming processes in very low-income areas. Support should also be provided to communities and States committed to ending the scourge of hunger. And support should be provided to direct certification efforts that automatically enroll eligible children in these programs.

The Department looks forward to using the $22 million provided in the Direct Certification Grants Program recently approved in the Agricultural appropriations bill to encourage States to enhance their existing direct certification systems with new technologies or borrow ideas from States with demonstrated direct certification success.

We also look forward to expanding support for breastfeeding, the medically preferred feeding practice for most infants in the WIC Program, especially through expansion of peer counseling programs.

We must do everything we can to improve the nutritional quality of school meals and the health of the school environment, our second priority. The recent Institute of Medicine report showed that the average American child between the ages of five and eight consumes about 720 empty discretionary calories per day, nearly half their total diet of about 1,600 calories a day. Our young people are eating far less dark green and dark orange vegetables than they need, far fewer fruits than they need, far more refined grains and far too few whole grains, and far too many high-fat dairy products and too few low-fat and non-fat dairy products. We can and must do better.

Additional support should be provided to train food service professionals so they have the skills to serve top-quality meals that are both healthy and appealing. We need to expand the current requirements of the Food Safety Program to all facilities where food is stored, prepared, and served. Every parent knows that encouraging children to try new foods can be challenging, but because children are developing preferences and practices that will last a lifetime, it is especially important that we recognize and support the role that school food service professionals play in serving foods that demonstrate that a healthy diet can be tasty and fun. But our approach can also reflect the critical role that the whole school environment plays, not just the lunch room. We need to promote healthy lifestyles and combat obesity throughout the school.

Not only should USDA establish nutrition standards for school meals, but we should set national standards for all foods sold in schools, including in the a la carte lines and in vending machines, to ensure that they, too, contribute to a healthy diet. This step is long overdue and critically important to enhancing the health of the school environment. And we need to strengthen school wellness policy implementation and promote physical activity in schools.

But to be truly successful in making our schools a healthier environment, we need more input from parents and communities and we need their help. More information must be provided to American parents on the performance of schools so they can make choices for their children and take action to make schools improve. We recommend that schools be required to share information about the content of their meals with the families that rely upon them, and we should work with stakeholders to develop and communicate common nutrition messages and provide materials in support of those messages.

Lastly, we should continue to advance the public trust by investing in the school meal performance. Through technology and training, we can reduce and should reduce error rates and result management challenges in a way that serves our children and the general public well.

Several weeks ago, through the passage of the Agricultural appropriations bill, Congress made an important first step toward accomplishing these goals. Thanks to the leadership of the Chair, Senator Chambliss, and Senator Harkin, and Chairman George Miller, we were able to improve children's access to meals during the summer, help enroll more children in the School Lunch Program, and improve health and nutrition in child care settings. I view this as an important downpayment on the priorities mentioned above.

I hope you will look at all these opportunities for improving the health and well-being of America's children as you consider legislation to modernize these programs. Just as teachers inspire and parents encourage our children, we must have healthy food that is available to help those future generations grow and learn. The President, the First Lady, and I are committed to combating hunger and providing healthier foods to our nation's children and I hope we will have your support in these efforts.

Again, I would like to thank the committee for the opportunity to appear before you this morning to discuss the reauthorization of the Child Nutrition Programs and I look forward to answering questions you may have this morning. Thank you, Madam Chair.

[The prepared statement of Hon. Thomas J. Vilsack can be found on page 89 in the appendix.]

Chairman LINCOLN. Thank you, Mr. Secretary. We are pleased that you are here. We do look forward to not only working with you to get this done, but get it done in a timely way in order to make sure that we get the full benefit of this program out into our schools and into our communities where our children need it, without a doubt.

I will start off with a couple of questions and turn to my colleague, and then start in the order of arrival with other members for opening statements and any questions that they may have.

Secretary Vilsack, there has been considerable discussion about the need of additional funding to increase reimbursement in the

National School Lunch Program and the School Breakfast Program, especially in light of the recent Institute of Medicine's recommendation for new meal standards, which will likely increase cost, as well. And I am certainly sympathetic to the concept of increased reimbursement rates. Common sense does tell us that as we improve that quality, it also increases the cost.

But I also want to be certain that if the committee does recommend an increase in reimbursement rates, that we are certain to be buying the outcomes that we want in terms of both meal quality and efficiency, and I think that is going to be really critical. Should the committee provide that additional funding for reimbursement rates for school lunches and breakfasts, do you have any idea as to how we can ensure quality? Does it make sense to provide for reimbursement rate increases that are conditioned on certain quality factors, is that an option? Or how do we go about that, in your opinion?

Secretary VILSACK. Madam Chair, this is an important issue. I think you have mentioned the fact the Institute of Medicine's report did reflect that their recommendations would carry with it additional costs. I think it is appropriate to note that it will take us some time to institute the recommendations of the Institute of Medicine, and during that period of time, we are going to continue to encourage schools to look at the nutritional content and value of the meals that they are providing.

I think it is important for us to reward top performers, look for ways in which we can work with the Secretary of Education and the Department of Education to reward performance. So we would encourage this committee and the Congress to take a look at reimbursement rates that would be linked directly to increased nutritional value in the form of more fruits and vegetables, more whole grains, less fat, less sodium, less sugar, transferring to low-fat dairy products, things that were recommended by the Institute of Medicine.

We know what we need to do. In addition, we also should take a look at increasing physical activity in our schools. It is a troublesome statistic to me that approximately one-third of high schools in this country are working at the recommended physical education level and just about half of our students in the country today actually have access to physical education. So I think there are many ways in which we can encourage healthier environments.

Chairman LINCOLN. Well, I agree, just having met with a lot of our school lunch folks in a symposium that was hosted by the Heifer International Project on the Farm to School Program, and talking to some of those food service people who were enormously grateful for the additional funding, because they have been using 40-and 50-year-old equipment. And one of the women said steaming vegetables for 300 or 400 kids one pot at a time is not very efficient or effective. She said, all we have got is frying equipment from 30 years ago. Making sure that they have got the kind of facilities and equipment they need to be able to help prepare those foods, I think is going to be critical, and I am pleased that we have gotten started with that as we created our extension.

The School Breakfast, program is such a critical program. Growing up on a farm, it is instilled in you that probably the most important meal you get during the day is to get off with a good start on breakfast. One of the things that I think holds a great deal of promise is some of the new methods for providing breakfasts in school. I know with 13-year-old boys, getting them up extra early to go to school is not a pleasant thing and oftentimes doesn't work with school children, trying to get them to the cafeteria before school starts. They would rather spend that extra 15 minutes in bed, and I am sure other children are the same way.

Has USDA looked into some of the different methodologies and assessed their effectiveness in reaching more children? I know there have been some suggestions experimenting with Grab 'n' Go Breakfast Bags or breakfast in the classroom or other things like that.

Secretary VILSACK. Madam Chair, we are constantly looking for ways and opportunities to encourage an expansion of School Breakfast. As I mentioned in my opening statement, we are still short of the number of schools that actually participate in this program and we would obviously encourage those that don't participate to do so.

We are open to suggestions to best practices. I think one of the responsibilities USDA has in this area is to be able to identify where best practices, where participation rates are high, where teachers report to us an appropriate environment where youngsters are active and energized early in the morning as a result of having a healthy breakfast.

We have done some research, as you probably know, in the past on whether or not a universal breakfast system would work. There are some concerns about mandating this, but I think there are ways in which we can identify—there are schools, Kevin Concannon was sharing with me earlier today, the Under Secretary, about how he was in a school in Colorado that was essentially having school [sic] in the classroom, which made it a little easier for youngsters, especially youngsters who may be a little bit young, to know how to access the food. If it is in the classroom, it makes it easier and more convenient. So I think there are ways in which we can look for opportunities for expansion.

Chairman LINCOLN. Well, I look forward to working with you, and I have got a few more questions I will save for later and I will turn to my colleague, Senator Chambliss.

Senator CHAMBLISS. Well, thanks, Madam Chairman.

Mr. Secretary, I am very pleased to hear you talk in terms of parental involvement in exercise in addition to just our diet, because there is no question but what this has got to be an integrated force if we are going to be successful in making sure that our children are healthy, which includes dealing with the issue of obesity. There are other reasons besides that why they need parental involvement in exercise. Having a wife who taught for 30 years in the classroom, parental involvement is so critical in the educational phase that without it, students have a much tougher time. But it is tough to get them involved in a lot of instances.

I look forward to dialoguing with you about how, from a nutrition standpoint, we can engage parents, and by doing that, and vice-versa with education, maybe we can kind of dual track that. The more involvement parents have, the healthier the kids are going to be and the better education they are ultimately going to get.

Congress has considered the issue of Federal standards for food sold in competition to the meals provided through the National School Breakfast and Lunch Program for a number of years and there are still several policy issues that obviously remain unresolved. You recommend a, quote, “national baseline standard for all food sold in elementary, middle, and high schools,” and I would like for you to elaborate on that recommendation a little bit. Are you talking, Mr. Secretary, about individually standardizing items in vending machines or in a la carte lines, or an overall program, and really, how are we going to define that? What is your thought about how we can enforce that?

Secretary VILSACK. Well, Senator, I think it starts with the wake-up call that the Institute of Medicine’s report suggesting that we have some serious issues with the quality, nutritional quality of what is taking place in our school lunch programs. But the concern that I have is that we could do everything we need to do on the school lunch line and it could be countermanded or counteracted by what we do or what we don’t do with reference to vending machines and things that are sold in the school during the school day.

So I think it is incumbent upon us to work with schools to create standards that basically define the nutritional value of things that will be sold. We have seen schools that have sort of transitioned, and we have been working with the industry, the food industry, with the beverage industry, that recognize the need to be responsible and are anxious to work with us in making sure that those vending machines have appropriate content. We know that youngsters will continue to purchase. We are not concerned about substantial reductions in school income because the vending machine content changes.

But we think it is important for us to lay a marker, to lay down what we think the nutritional value ought to be and then work with schools. Obviously, as this goes through a rulemaking process, we will receive comments. We will receive information from experts. But the bottom line is for us to make a statement that we want our school environments to be healthy, and to do that, it is going to require not just focusing on more fruits and vegetables in the school lunch line and more fruits and vegetables, et cetera, during the Breakfast Program, but it is also going to take a look at vending machines.

Senator CHAMBLISS. I have heard from a number of my food banks around my State about the increase for demand of items in the respective food banks, and obviously that increased demand includes families with an awful lot of children. I want to commend you on the job that USDA has done in meeting that increased demand, and again, that compliment has come from the food bank directors themselves. USDA has done a very good job of addressing this increased demand.

That does bring on other issues, though, when we see this population increase. Can you share with the committee how you see the outlook for ongoing levels of USDA food and financial support for emergency food providers and give us an idea of where you think we are headed there? What kind of time line are you anticipating that increased demand?

Secretary VILSACK. Well, Senator, I think it is obviously tied to the health of the economy. It is my——

Senator CHAMBLISS. I was hoping you had a good, solid projection, Tom, that we could look at.

Secretary VILSACK. I will tell you, just from a USDA perspective, we are encouraged by the number of grants, loans, business activity in our rural development portfolios. As a result of the Recovery and Reinvestment Act, we know that there are a significant number of infrastructure projects that are going to result in construction and employment opportunities in 2010 and we are encouraged by the participation, the interest, the capacity to move resources out at USDA. So I am hopeful that we will begin to see a leveling off of this rather steep increase. But it is clearly tied to the health of the economy.

Fortunately, the Congress had the wisdom to include in the Recovery and Reinvestment Act more resources for SNAP, more resources for food assistance, and the reason I say that is that there is probably no more direct immediate stimulus than the resources that you are providing through SNAP.

Ninety-seven percent of those resources are actually invested within 30 days. In other words, people actually utilize those resources immediately. And if you think about it, when they use those resources, it means something more is being purchased at the grocery store. Somebody has got to stock that, which means that you can keep your job at the grocery store. Somebody has got to truck it, which means somebody keeps their trucking business open. Somebody has got to process it, which means those processing facilities are still operating and employing people. And someone has got to produce it, which means the farmers and ranchers ultimately receive the benefit.

So it is important for people to recognize the economic development component of food assistance. This isn't just about human services. It isn't just about the moral responsibility we have. It is actually good economics in tough times.

So we attempted to try to get these resources out as quickly as we could. We saw a tremendous demand. And we will continue to work hard with the States. I will say that we have to acknowledge the activity of State governments, Governors, in helping us administer these programs effectively.

Senator CHAMBLISS. Are you comfortable with where you are resource-wise with respect to the anticipated continuing demand?

Secretary VILSACK. Well, I think our focus, Senator, is making sure that we have adequate resources to be able to expand programs that currently, in our view, are underutilized. We have still youngsters today that don't participate in the School Lunch and School Breakfast Program that need the School Lunch and School Breakfast Program, which is why we are suggesting additional resources and improvements in how people qualify and how people can become eligible for these programs. We are looking for ways to remove the stigma that is sometimes associated with participation in these programs so that more people participate.

Our focus obviously is on the children of this country. I find it, and I know you do, too, troublesome that when the report was issued yesterday that over a million children every day are faced with low food security, which is skipping meals, not having sufficient nutrition, and we can't expect those youngsters to perform at their optimal level as students if they are not well fed and well cared for.

Senator CHAMBLISS. Lastly, for several years, USDA has worked very closely with the Department of Defense to distribute fresh fruits and vegetables to schools around the country. In recent years, DOD's Fresh Program has made changes to its procurement and distribution process and there have been concerns raised about the results of these changes, such as higher prices and inconsistent deliveries. While these concerns have been voiced only in certain pockets of the country, I wanted to bring this issue to your attention. While previous farm bills have mandated that USDA partner with DOD for the distribution of produce, the most recent farm bill gives us USDA the flexibility to consider other distribution partners if they are needed.

I don't have a question about this, I just wanted to highlight it with you. I am going to submit some questions to you and I look forward to getting your answers to see how we can address this further down the road.

Secretary VILSACK. Senator, we will take a look at those questions and answer them promptly. We are currently purchasing 60 different varieties of fruits and vegetables under that program. Obviously, if there are problems in distribution, we need to address them.

Senator CHAMBLISS. Thanks, Madam Chairman.

Chairman LINCOLN. Thank you. Just for the members' knowledge, I think there are going to be either two or more votes called at 11:15, unfortunately, so we will try to keep our hearing going.

We go to Senator Harkin, and I would just like to take a personal privilege and say thank you for all your hard work on this issue and handing over a committee that is certainly well versed and well equipped to deal with this. So thank you, Senator Harkin.

Senator HARKIN. Madam Chair, thank you very much, and thank you for your leadership on this and always working together to try to move this child nutrition bill.

I also want to thank our Ranking Member, Senator Chambliss, for his longtime and continuing interest in the area of child nutrition.

I just ask that my statement be made a part of the record.

[The prepared statement of Hon. Tom Harkin can be found on page 54 in the appendix.]

Senator HARKIN. You know, there is a lot of debate going on and now we are all getting wrapped around the axle on health care reform around here, but it seems to me that the essential underlying feature of having a healthy country is having healthy kids. If we are going to change all this system of how we are paying the bills and yet we have got a whole cohort coming along that are overweight and obese and have diabetes and high blood pressure, we are going to go broke.

So it seems to me we have really got to focus in this area, and I want to commend our Secretary of Agriculture for again focusing on this, not just as Secretary, but before when, as Governor of the State of Iowa and as a former State Senator, this has been an area, I can tell you, of Tom Vilsack's focus and interest for a long, long time. So I am glad we are kind of coming to this point where this committee and the Department and administration are working together to really move the ball forward in great ways in terms of child nutrition.

But I can't resist the opportunity at times like this to always ask the fundamental question that I keep asking over all these years. If schools are places we send our children for education, why do we have vending machines in schools? Tell me again, why are there vending machines in schools? There weren't vending machines when I was young. I mean, there were vending machines, just not in schools. I am not that old.

[Laughter.]

Senator HARKIN. We just didn't have them in schools. I followed this and watched this happen, and then a la carte lines and sales of foods. Mr. Secretary, you said it best. You said children are subject to innumerable influences in their environment. As they develop preferences and practices that will last a lifetime, their choices are shaped by their surroundings, at home, in school, and their wider community. The school nutrition environment is a powerful influence in this regard. Accordingly, the administration recommends setting higher standards for all foods sold in school. You stated that earlier.

What good does it do for the Secretary to have jurisdiction over the food in the lunch room when the kids can go right down the hall and put their money in vending machines and get whatever they want, or they can go to a snack bar someplace or that kind of thing?

So I think we have to ask—I always ask that fundamental question. Why do we have vending machines in schools? It seems to me that we got off track. We got off track by providing an easy, easy access to kids for high-sugar, high-fat, high-salt type of foods. It seems to me that we need to recommit ourselves to having schools be commercial-free zones for kids—commercial-free zones, where they are not inundated with all the commercials. It is almost like our schools are becoming like little minor strip malls where kids have easy access to some of the worst foods. So this fundamental question of why we allow this.

And then, again, the Secretary of Agriculture should have the authority, and that is what my bill does, and I am grateful, Madam Chair, for your support of the bill, and we have 30-some cosponsors on both sides of the aisle on this. I think the time has come to give the Secretary that kind of authority so that we have a standard. We look to the IOM, we get scientific-based data, and let the Secretary have that authority.

One question I had, Mr. Secretary, was sort of asked by Senator Chambliss. He talked about the additional funding and stuff. But there is another thing. We have seen some schools in this country where they have changed the way they prepare foods. They use locally-grown foods and they deliver healthier, more nutritious foods and the cost increment is not any more than buying the packaged foods. It is just a different way of doing things.

I use the example in our State of Cedar Falls, where they have shown that they can prepare very healthy, nutritious meals that kids like. It is not just a glump of something put on a plate. And they have kept their costs down very comparable with what they get with packaged meals.

I guess the only thing I would ask from you is, is the Department looking at examples, and I am sure there must be examples in other States and places where schools are experimenting with ways of preparing local foods, yet keeping the costs down?

Secretary VILSACK. Senator, we are, and in fact, we are putting together as part of our Know Your Farmer, Know Your Food Initiative a set of tactical teams from the USDA that are going to go out and educate school districts and food service officials with what is available in the locality where their school district is located. Oftentimes, there is a disconnect between what is available and what people know is available, and those tactical teams will encourage local production and local consumption and creating the link.

We are also going to use some of our rural development resources to try to create the supply chain that in some cases does not yet exist, but if it did, schools could access those foods more easily and less expensively. So that is part of our Know Your Farmer, Know Your Food Initiative.

Senator HARKIN. Great. One last thing. Next year, on the other committee on which I sit, we are going to reauthorize the Elementary and Secondary Education Act. That is the Department of Education. I know you are working closely with Secretary Duncan. I encourage you to keep that up. We have got to meld these two together, this bill, Madam Chair, that you are going to lead on school nutrition and the Elementary and Secondary Education Act to get exercise and more time for our kids in school to exercise. So I encourage you and Secretary Duncan to continue to work together to put these together as a package.

Secretary VILSACK. Well, I have appreciated the partnership that we have. I think both Secretary Duncan and I believe that we need to reward good performance and this is certainly part of it. As I said before, I am a little bit distressed by the statistics that suggest that so little physical activity takes place in many of our schools. It is an issue of time, but it is also an issue of understanding the importance of it and how it leads to better academic performance.

Senator HARKIN. Thank you, Mr. Secretary, thank you Madam Chair.

Chairman LINCOLN. Senator Lugar.

Senator LUGAR. Thank you very much, Madam Chairman.

Let me just follow up on Senator Harkin's thinking. There was recently a report offered by a military group in Washington which indicated that because of poor education, poor nutrition and obesity, essentially physical ailments in addition, 75 percent of Americans 17 to 24 years of age would be ineligible to serve in the Armed Forces. That is a huge number, three-quarters. Mind you, this covers all three of the Departments that you have recently mentioned are going to be coordinating, you with Secretary Sebelius and Secretary Duncan.

I would just underline the importance of this in a recent visit I paid to Warren Township's school in which a number of students have not done well have been brought back into the system, about 280 people. They have combined that with a community health center which literally serves as an emergency room for the community. They have combined that with the school feeding programs so that the health side of it as well as the nutrition and the education are combined. It is a remarkable exercise, and I am certain there are other examples of this around the country.

But I mention that it is not impossible to do what you three Secretaries are thinking about. What I am wanting to inquire today is how are your preparations going? In other words, what are the physical elements of this cooperation? Do you have a steering committee? Do you have a group of people that gather together from time to time in addition to you as Secretaries? In other words, what can we look at in Congress to follow in all of our committees, whichever they may be, which may be elements of this coordination so that American youth are not only prepared to serve in the military, but prepared really to serve as citizens, parents, and what have you?

Secretary VILSACK. Senator, first of all, let me comment on the fact that you and your staff provide a good example. I understand you have got a fitness activity that you participate in with your staff and it is something I think many of us should follow.

One of the great opportunities that we have is the leadership of the First Lady on this particular issue. I have been joined by her on a number of occasions where she has indicated that this is a priority for her. It is obviously a priority for the President, as well. And she within the White House is creating an opportunity for us to meet on a regular basis to take a look at how we can—for example, Senator Chambliss mentioned the Healthier U.S. School Challenge—how we can encourage more than the 600 schools that are currently acknowledged as part of that challenge to participate? And as you know, that involves that combination of better diets, better nutrition in the school environment, as well as physical activity. The First Lady wants to be able to acknowledge schools that meet that challenge. That is a good way of getting the word out about the importance of this.

We need to continue to look for ways in which we can provide best practice information to school districts that are interested in this, and so there is a coordinated effort within the White House where you have multiple agencies working and involved on this, and we are absolutely committed to it, make no mistake about it. This is one of the top priorities that I have identified for the USDA.

Senator LUGAR. Well, that is very encouraging, and I am hoping there are some metrics that can be devised that show how much progress is occurring.

Secretary VILSACK. Well, that is an interesting challenge, because we are trying to determine precisely what the right metric is. Is it time? As you know, the NFL is currently working to promote its Play 60 Initiative, which we are very interested in working with them to encourage that. Is it reducing the levels of obesity, and if so, how is that defined?

I will tell you that it isn't just in the school environment that we need to be concerned about this. If you take a look at early childhood statistics, a very troublesome trend zero to five in terms of obesity, as well. So there are also efforts that have to be taken in early childhood, which is why the Department is partnering with Sesame Street and other programs to do PSAs and ways in which we can encourage young parents to understand what they can do to make it better. So there are an awful lot of partnerships.

We are currently dealing with the metric issue. I don't know that we have an answer today, but we are aware that we have to have a metric by which to determine success or failure.

Senator LUGAR. My second line of questioning is the goals that you have expressed in your opening statement and that many members of the committee would reinforce with regard to things we ought to be doing in child nutrition. By and large, expansion of these programs is expensive. It carries some fiscal responsibility. I am just curious, as we reauthorize the programs, have you been able to work through the budget process to determine whether we can pay for them or what the prospects are of this?

This is not a new question. Each time around, reauthorization comes and there are annual appropriations and what have you. And sometimes even within the Agricultural budget, there are—I wouldn't say battles, but disputes as to where the money ought to go, whether in terms of crop subsidies or conservation or all sorts of other good things that we do. But what is the prospect for the financing of the goals that you have suggested today?

Secretary VILSACK. Senator, I think it is important to focus when you are dealing with the issue of costs and affordability of what the cost of inaction and inactivity might be. I think Senator Harkin put his finger on the cost long-term. If we fail to address this issue aggressively now, we will clearly, clearly pay for it in significant increases in health care expenditures in the future. So that is the first thing.

Secondly, I think it is incumbent upon us to continue to look at ways in which we can utilize the resources that Congress has provided to us in more efficient ways, and we may be able to come up with a suggestion or two about how that could be done. But I think it is important for this committee, if I respectfully could say this, to really raise the level of appreciation for the importance and priority of this issue.

If you combine the hunger issue with the obesity issue, with nutrition and food safety, I think we are at a tipping point in this country and hopefully in this Congress to take all of these matters to a different level. And when you take them to a different level, they become a significant priority. And as you well know, Senator, from your experience, you fund your priorities. You fund your priorities. I believe this ought to be a priority.

Senator LUGAR. I admire your leadership and we will support what you want to do here. I just as a practical matter say there will come a time when choices will have to be made by this committee as well as our appropriation types and it will be important for us all still to be on board at that stage. Thank you very much.

Chairman LINCOLN. Thank you, Senator Lugar.

Senator Stabenow.

Senator STABENOW. Well, thank you, Madam Chair. First, I want to congratulate you on your new position and on picking such an important topic for the first hearing of your Chairmanship, and also to thank Senator Harkin for his wonderful leadership over the years. But I very much appreciate your leadership, Madam Chair, and also the priorities that you laid out for us in terms of this bill, which I think are very important and welcome.

Secretary Vilsack, it is always great to see you.

I did want, within the priorities that the Chair has laid out, to speak about an additional piece of this in addition to breakfast and lunch which is after-school or supper programs. I am very pleased that Senator Lugar has joined with me as well as the Chair and Senator Brown, and I know there will be support from other members of the committee, as well, for an After-School Meals Act that would expand what is right now essentially a pilot, where 13 States plus the District of Columbia are authorized to provide supper for young people up to the age of 19. And, of course, in our other States, it is up to the age of 12, and there are ways in which we have lessened the bureaucracy in that.

I do have a question, though, about how that is actually working in States. Michigan is one of the States that is authorized, but we right now are in a situation where we have very low participation even though we have very high need, and one of the reasons is that the suppers can only be reimbursed through the Child and Adult Care Food Program. It is not through the other programs, the Russell Program on School Breakfasts and Lunches. What this means for us is it is a totally different funding stream. It means they have to comply with different State licensing laws and regulations on after-school day care to provide for this and it is just another whole bureaucracy. So it is stopping States even who have been authorized, like Michigan, from being able to fully participate.

I wonder if you and your staff would be willing to work with us, both to support the legislation, which would expand the program to all 50 States, but to also create a way where States could use the Russell funding criteria rather than going through the CACFP right now.

Secretary VILSACK. Senator, as you know, we obviously, absent legislative direction and authority, don't have the capacity to utilize other programs. We basically have to work within the lane provided by the Child and Adult Care Food Program, and as you well know, that is a program in terms of participation that is substantially lower in terms of numbers of people than the School Lunch and School Breakfast Program. I think it is around 2.6 million people that are currently involved and engaged in it.

We obviously would work with Congress if you direct that this is something that is a priority and that you believe that it needs to be expanded and you provide us the legislative authority. We will do everything we can to administer it as effectively and efficiently as possible.

We are interested, and I might say from a priority standpoint, we are interested in continuing to also expand participation in those regular programs that already have high levels of participation, but still students, still youngsters today don't fully participate in them. It is important for us to also improve, as we talked about earlier, the nutritional value, and there is some expense associated with that. But if you give us the legislative authority, we will use it as effectively and efficiently as we can.

Senator STABENOW. Obviously, we have multiple needs. I think it is clear, though, in this economic time where families are struggling with one or two or three different jobs or part-time jobs to try to pull things together and keep a roof over their heads that the Supper Program has also become something very important for the same children. So I appreciate working with you on that.

And then the other question I would have relates to efforts we have been working on to modernize school kitchens. I was really struck by a visit I had a couple of years ago in Traverse City, Michigan, where a school on its own chose to take away just the microwaves. We think about, well, we will just have healthy food. But most of the schools don't have the capacity to cook healthy food. They have a microwave. They have other things for fast food. But they don't really have a kitchen.

And this particular school on their own had actually redone their entire kitchen so they could actually have not only salads, but cook real food. I know this is something we have been working on. We put dollars in the economic recovery package and money into Agriculture appropriations bills. But at least in Michigan, the requests have been six times higher than the dollars available. It seems to me that it is going to be impossible for schools to do what we wish them to do if we don't give them the infrastructure to be able to cook healthy food and prepare healthy food.

So I wonder if you might give us an update on where we are on that program, and given the tight budgets that we all face, are there ways we can creatively partner with schools or public-private funding in order to modernize kitchens, which I think if we are not careful is really going to be a barrier for us getting to where we want to go on this.

Secretary VILSACK. Senator, as in all things in this topic, it is a complex set of discussion points. First of all, again, the Congress and the administration should be thanked for seeing the wisdom of putting resources in the Recovery and Reinvestment Act for modernization efforts because it gave us a sense of what the demand was. As you know, you put $100 million. We received 24,000 applications—24,000 applications—which would have, if we had fully funded all of them, would have required $640 million. We were able through a competitive grant process to fund a little over 5,000 of those grants.

We are certainly appreciative of the $25 million that was included in the 2010 appropriations bill and we will use a process similar to make sure that the $25 million is stretched as far as it possibly can go. I think the more we do this, the more awareness will be created.

I would say one other thing. I think it is important to also recognize the need for additional technical training and education for food service providers, and that is why it is important for us to continue to support the National Institute at the University of Mississippi to make sure that we continue to provide additional training and upgrade the skills of those who are currently managing and operating these food service operations so they, in turn, can make the case locally effectively of the need why this should be a priority.

The more awareness, the more discussion there is, the greater the likelihood that private foundations, community foundations, community backers, school boards will understand the significance and importance of these investments, and that way, we can leverage the resources that the Federal Government has.

Senator STABENOW. Thank you.

Chairman LINCOLN. Senator Grassley.

Senator GRASSLEY. Thank you Madam Chairman, Secretary Vilsack; thank you for your testimony today.

I have been preempted on a couple questions, so I may only have one, but bring emphasis to the issue that the Senator from Indiana brought up about national security. That report emphasized that what we do today is going to have a difference when young people today are joining or not joining the military, being ready or not being ready for the military in 2030. So we are talking about national security issues, as well.

My question is in regard to the report that you issued yesterday, and I commend you for that. It brings attention to what this hearing is all about today. When you try to, as a Federal agency, try to lead local governments and schools in America, or local governments, if there ever is a local government, could you describe any resistance or reluctance on the part of schools to develop these policies with your agency's outreach efforts?

Secretary VILSACK. Senator, drawing on my experience as a mayor, a State Senator, and a Governor, I know that during stressful economic times, oftentimes in State budgets, a substantial percentage of the State budget goes to schools. And so when budgets are being cut, then obviously resources available to schools are reduced and that creates challenges for school boards and administrators. So anything relating to additional cost obviously carries with it some stress and pressure.

That is why I think it is important for us at the Federal level to appreciate and understand that challenge and to figure out ways in which we can, A, provide additional resources if they are available to make it easier, and B, work with those school districts to create creative and innovative ways in which they can stretch those dollars. It gets back to the training issue. It gets back to the equipment issue that I discussed earlier.

So I think that the pressure point here is not—I think everyone wants our children to have more nutritious food. I think everyone appreciates the necessity of physical activity. But I think time and resources are often the pressure points and we are trying to address at least one of them here with this discussion this morning.

Senator GRASSLEY. Madam Chairman, I am going to yield back my time. I had a couple of other questions, but they were asked by other members.

Chairman LINCOLN. Thank you.

Senator Klobuchar.

Senator KLOBUCHAR. Thank you very much, Madam Chair, and thank you for holding this important hearing. We both have children of the same age and we both have that experience, I think, of walking into that cafeteria line and seeing these kids having to make the choice between a yogurt or french fries, and guess what they choose. I think most adults might make the same error.

And so I am really glad that we are moving forward with this Child Nutritional Promotion and School Lunch Protection Act. I am proud to be an original cosponsor of that bill. I thank Senator Harkin for his leadership, as well.

The way I look at this, we have two things going on. We have the nutrition issues which we are talking about today, Secretary Vilsack, and thank you for your leadership on that, as well as the fact that as recesses get shorter, kids waistlines are getting wider, and so we also have to look at the exercise that they have. The availability of exercise both during the day and after school, I think is very important, as well.

But I wanted to start—I know Senator Harkin touched on the vending machine issue and this idea that we can have more healthy food in vending machines, but I wanted to talk about this a la carte line idea, that maybe free choice is not the best idea. You want to have healthy food, but if you start having choices that aren't that healthy, that doesn't really help. And what I like about this bill is that it looks at the whole school nutritional value. Do you want to talk about some of the problems if you have choices that aren't at all healthy?

Secretary VILSACK. Well, the Institute of Medicine in its report outlined that it isn't just simply having a planning mechanism that focuses on nutrition, but it also needs to address—the school needs to address those choices and essentially encouraging, creating ways in which we can encourage schools to have youngsters make the right set of choices.

Part of it, I think, is information. As we know more about the caloric content of our choices, we sometimes make different choices——

Senator KLOBUCHAR. I don't think a seven-year-old is going to be able to know that.

Secretary VILSACK. Well, I was thinking about all the youngsters in the schools, high school, middle school. I think there are youngsters certainly in high schools and in the upper grades of the middle school that are becoming more conscious of that.

Secondly, it is creating systems and processes in which schools are rewarded or incented for encouraging and limiting the choices that youngsters have and making sure the choices they make are nutritious. And I think that there are ways in which we will, through the process of finalizing the rule, following the Institute of Medicine's report, ways in which we can look to incent the right kind of behavior.

Senator KLOBUCHAR. Also, Secretary Vilsack, I think this idea of having the standards, these national standards, national interpretation of these dietary guidelines, would not only be better for our kids, but could save money, as well. Could you talk about that?

Secretary VILSACK. Well, any time you have standards, it gives definition to the school and makes it a little bit easier for people to comply with the requirements, and therefore, hopefully, it would encourage a broader array of choices which encourages competition and in turn should support lower prices.

I think, secondly, the important role that local production and local consumption and linking—we talked about this earlier—our farm to school efforts, our Know Your Farmer, Know Your Food efforts, we think we can reduce the cost by reducing the transportation expense that is associated with the sale of processed items completely. So there are a multitude of ways in which we can stretch those dollars. It is also better training. There are recipes, there are ways in which we can encourage those dollars to be stretched and still provide nutritious food. We are dealing with this right now sort of globally by encouraging on the USDA web site recipes and so forth that allow the SNAP recipients, for example, to be able to figure out how to stretch their resources.

It is about the work that Sesame Street is doing with early childhood. They have distributed three million booklets that contain recipes, games, ways in which youngsters can be encouraged to put a rainbow on their plate, things of that nature, to understand the difference between, as they say, anytime foods and sometimes foods, which some of us obviously have difficulty with. But if we can get our youngsters to understand the difference, understand that a treat is a treat and not something that can be expected every day, I mean, those are all ways in which you can save money and provide more nutritious foods.

Senator KLOBUCHAR. Well, one issue that was raised with me was this idea of charging school nutrition programs indirect costs. As you know, there are no limits under current law placed on the amount of Federal nutrition money that can be directed toward indirect costs, such as heating the school or paying for paper. Do you think there should be some limits, that would help to funnel more money toward the nutrition programs, since we are also dealing with shortages in our school budgets?

Secretary VILSACK. Here is the challenge with that issue. A 2008 study suggested that 79 percent of school districts are not currently involved in that type of activity with indirect costs. Those that are, it is a wide range of those who are doing it the right way, charging for reasonable and necessary expenditures, and those that may be taking advantage of the circumstance, I think rather than placing a cap which could potentially encourage more schools in that 79 percent to utilize indirect, rather than doing that, I think perhaps a better way would be to focus on those schools that are perhaps utilizing the capacity in an ineffective way or an inappropriate way and encouraging them to get their indirect costs more in line with what is reasonable and necessary.

And let me give you an example that was given to me yesterday. If you are going to charge a School Lunch Program for the dumpster that they use, that is fine. But if you are going to charge them for every dumpster in the entire school system, that may not be okay, and those are the kinds of things that we need to encourage schools to do a better job of.

Senator KLOBUCHAR. I appreciate that, and I am out of time here, but I also at some point want to talk to you about the Child and Adult Care Food Program and trying to get more places online there, because as you know, that is also a place where we want to have nutritional standards set and I am working on some legislation in that area. Thank you very much.

Senator HARKIN. [Presiding.] Thank you.

Senator Gillibrand, we are on the last part of the first vote and we have two votes, so please proceed.

Senator GILLIBRAND. Thank you, Mr. Chairman. Thank you for holding this hearing. I am very grateful to you and Senator Lincoln for your leadership on this issue.

Thank you, Secretary, for being here and for your leadership on these issues.

Some of the things that I am most focused on right now is the high obesity rates in America. We spend about $100 billion a year on obesity. And when I was a kid, only about five percent of children were obese, and now it is higher than 17 percent. So this is a grave national health care issue that has to be addressed.

Some of the best ideas that have been developed through your leadership through the hearing are feeding our children better foods. One thing that I have advocated for is a 70-cent increase for school lunches. That 70-cent increase would allow for more whole foods, more whole grains, more fruits, more vegetables. We could feed our children better foods.

Second, we want to keep our kids more active, fun programs that get them being athletic, being outside, making sure all schools have an hour of P. E. or gym time. Teaching kids about nutrition—most kids don't understand about nutrition, making that part of the school curriculum. And banning trans-fats, just banning them across the board in all schools. We have some leadership in New York, in New York City, where they have already done that quite successfully.

Another issue we have in high-cost States like New York is we would also like to see more people eligible, which you addressed in your opening remarks, both for breakfast and lunches. But one thing, because our State is such a high-cost State, a lot of working families can't afford good quality lunches for their kids, and so if we could increase the eligibility rate based on HUD's rental scheme, you would actually be able to get more children in, to maybe about $40,000 for a family of four income level. So that is another area of interest that I have that I hope you will pursue and look at.

And then my third area of concern is food safety. I have begun looking at this issue. I am very concerned about lack of testing for E. coli, for example, in hamburger meat before it is ground up. I am very concerned about the lack of notification. If foods are recalled, our schools are not even notified that a food has been recalled in a grocery store or in the national media. So our schools need far more information, and our parents have no information whatsoever about where our food comes from.

In particular, there is an article today in USA Today that I hope you study, because it is a very concerning article that brings some significant evidence to bear on this topic. First of all, they report that between 1998 and 2007, the data that they have been able to collect shows 470 outbreaks where 23,000 children were made sick. And some of the examples they use are where there was evidence that the FDA knew about that a certain producer or provider of food had unsanitary habits, had made children sick in the past, and that information never got to the school districts, never got to the parents.

So I would like you to address that issue today in our time. Given the complex task of assuring food safety, and it is shared jointly by the USDA and the FDA, can you please elaborate on the steps you are taking to ensure better coordination between your agency dealing with the food safety and the Food and Drug Administration? I have heard reports that the FDA has delayed finalizing an MOU with the Food and Nutrition Service, so I would like you to discuss some of the problems you may face there.

And second, can you also talk about the steps that the USDA has taken to help schools increase transparency about what items are being served to students so parents can be more involved in planning menus and the development of those menus?

Secretary VILSACK. Senator, thank you for raising the issue of food safety. I know that is of particular interest to you and I appreciate you addressing this. It is a deep concern for us at USDA. It is the reason why we encouraged the President and were encouraged by the President's establishment of the Food Safety Working Group that involved myself and Secretary Sebelius as the Co-Chairs.

As a result of that Food Safety Working Group, whose work is still ongoing, there have already been a number of steps taken to try to address the issues raised in the article that you mentioned.

First of all, as it relates to ground beef specifically, we have started a process of encouraging the testing of bench trim that goes into ground beef, which was not done before, which we think will help reduce E. coli in ground beef. We are also focused on salmonella in poultry and increasing and enhancing our roles in that respect. We are increasing worker training.

We are also working on a unified incident command system and structure. We understand and appreciate that there has been a lack of communication between the two agencies and a gap in communication, which results in school districts not getting information on a timely basis. We are addressing that with this unified incident command structure and system. We also appreciate the need for us to get information to parents as quickly as possible, which is why we are exploring the utilization of the social marketing techniques, Facebook, Twitter, and the like, to try to get messages out as quickly and as effectively and as correctly as possible.

Now, we are instituting within USDA, as it relates to our portfolio of food safety issues, a series of initiatives. We have developed a hold and recall procedure for foods procured by USDA for the National School Lunch Program. We have got a commodity complaint system in place that has been added to our electronic commodity ordering system. We have a rapid alert system to quickly notify program operators of food safety issues. We are utilizing that electronic commodity ordering system to announce recalls of non-USDA commodities.

We are implementing a food safety program developed in part on our HACCP principles. In fact, school districts are the only retail outlet, if you will, that is currently operating under HACCP principles. As you know, we are requiring safety inspections within schools, two a year. We are now at 70 percent participation. We want to get to 100 percent. We are instituting a public notification system that allows individuals to receive bulletins of significance, especially recalls affecting USDA commodities.

So there is an awful lot of activity emanating from the Working Group. We are very focused on this. Staff knows that this is another priority area of ours, and so I can assure you that we are going to try to do better than we have done.

Senator GILLIBRAND. Thank you, Mr. Secretary. I will go vote and come back. Thank you.

Senator CHAMBLISS. [Presiding.] Mr. Secretary, the number of members attending has absolutely nothing to do with the quality of your testimony——

[Laughter.]

Senator CHAMBLISS. —and everything to do with this vote that is going on. We are going to try to keep going here.

First, I would ask unanimous consent that the testimony of Kraig R. Naasz, the President and CEO of the American Frozen Food Institute, be inserted into the record.

[The prepared statement of Mr. Naasz can be found on page 98 in the appendix.]

Senator CHAMBLISS. Mr. Secretary, in regard to your recommendation that schools be required to share information about the content of their meals, are you suggesting that schools post this information in the cafeteria, similar to the legislation that we are considering where restaurants are going to be required or may be required to post information relative to items on the menus, or what exactly are you talking about here with regard to the information provided?

Secretary VILSACK. Senator, what we are trying to do is to try to engage in a more meaningful way parents, so that parents are informed and are up to speed with what is happening in school. Virtually every school that I am aware of, I suspect has either a newsletter or a website or a combination of some kind of method by which they communicate with parents. Our suggestion is that we utilize those communication techniques to let parents know precisely what is taking place relative to the nutritional value of what their children have access to in the hope that they will either support the school in increasing and enhancing nutrition, or acknowledge that the school has made efforts to increase nutrition or support that at home, as well. We think the more education, the more information people have, the more informed choices they will make, and the better choices they will make.

[Pause.]

Secretary VILSACK. Senator, if I could add just one other comment on the issue of information——

Senator CHAMBLISS. Sure.

Secretary VILSACK. This is a consistent theme throughout the various programs that we are administering. We are working very hard to encourage SNAP recipients, for example, to have more information available to them about the nutritional value of certain food products, and we see in some grocery stores around the country a real concerted effort to inform the customers. In my home State, the Hy-Vee Food Chain, for example, is currently assessing a nutritional value, a numerical value to virtually everything that they are going to sell in their grocery store so that people can then make an informed choice. They started, I believe, in the cereal area, and what they found was that when they did that, that shredded wheat sales went significantly higher than they had anticipated. So it is really about informing folks so they can make the right set of choices.

Senator CHAMBLISS. It is interesting that people are starting to pay more attention to what is on the side of those boxes now, so that is encouraging.

Secretary VILSACK. I think we are all very sensitive to health care costs, and as Senator Harkin suggested, one way you can bend that health care cost curve is to have prevention and wellness, and that requires better nutrition and more physical activity.

Senator CHAMBLISS. Mr. Secretary, we are going to go ahead and move on. I know you are extremely busy and we don't need to keep you here. If anybody does have any questions, the record will be held open and they can submit those questions to you in writing. Thanks for your willingness to come up and provide information on these issues that are so critical to your functioning as the Secretary, but from a policy standpoint to aid us. So thank you very much.

We will now move to the second panel. To the members of this panel, thank you for taking your time to come up and visit with us today. Welcome to the Senate Agriculture Committee. We look forward to hearing your testimony.

First of all, we have Dr. Margaret Bogle, Executive Director, Delta Obesity Prevention Research Unit, U.S. Department of Agriculture, Agricultural Research Service, from Little Rock, Arkansas. Dr. Bogle, welcome.

Mr. Rich Huddleston, Executive Director, Arkansas Advocates for Children and Families in Little Rock. Welcome to you, Mr. Huddleston.

Ms. Rhonda Sanders, Executive Director, Arkansas Hunger Relief Alliance, also from Little Rock.

And Ms. Jennifer Smith, Director of Compliance, Wal-Mart, Bentonville, Arkansas. Ms. Smith, welcome to you.

Dr. Bogle, we will start with you for your presentation, and Mr. Huddleston, we will go right down the line there upon completion by Dr. Bogle.

STATEMENT OF MARGARET BOGLE, EXECUTIVE DIRECTOR, DELTA OBESITY PREVENTION RESEARCH UNIT, U.S. DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, LITTLE ROCK, ARKANSAS

Ms. BOGLE. Chairman Lincoln, Ranking Member Chambliss, and other members of the committee, my name is Margaret Bogle. I am a nutrition scientist with ARS located in Little Rock. I want to thank you for this opportunity to come before you today to discuss reauthorization of the U.S. Child Nutrition Programs.

My hope is the relating of my experiences in the lower Mississippi Delta of Arkansas, Louisiana, and Mississippi, working with families, rural communities, and schools, public and not-for-profit agencies will enhance your discussion of the USDA Child Nutrition Programs. These are complex issues which have already been described this morning, but they require the innovative efforts of our government working in collaboration with individual citizens, families, communities, farmers, food processors, and manufacturers, and educational [inaudible] at all levels. My goal is to set the stage with an introduction to the nature of good nutrition and healthy lifestyles for families and children so that the rest of the panel can present their views of the role of policy changes, child advocacy, and recommendations for the reauthorization of the Child Nutrition Programs.

Secretary of Agriculture Tom Vilsack and First Lady of the United States Michelle Obama have taken a leadership role in recent months with the example and message of healthy eating as it relates to the health and well-being of our children and young people. The First Lady's White House Garden, the People's Garden at USDA, and the joint USDA-White House effort to promote the Healthier U.S. Schools Challenge clearly shows that our senior leadership understands the importance of healthy eating and physical activity for children and has made it a priority.

An ongoing concern is that almost one-third of our children are overweight and at risk of becoming obese. We know that obese children have much greater risks of becoming obese adults than those children who maintain healthy weight patterns, making them much more susceptible to various chronic diseases, such as hypertension, diabetes, and cardiovascular disease. Overweight children in many instances are not physically able to participate in vigorous physical activity with their peers and are often subject to ridicule or even bullying. This can lead to more serious emotional problems and may contribute to additional overeating, which exacerbates the original problem.

Another question is whether or not some children are getting enough to eat. Food security studies for 2008 released just yesterday and already entered into the record today indicate that approximately 15 percent, or 17 million households, were food insecure at some time during the year, which is an increase of four percent from 2007. And the negative influences of food insecurity on children's health are included in my written comments.

Children who do not eat breakfast have lower scores in school, more tardiness, and increased rates of absenteeism than their counterparts who do eat breakfast, again, showing that the School Breakfast Program makes a contribution not only to the health of the children, but also makes it possible for them to take advantage of the education provided at school. All children should be encouraged to eat breakfast. Children who get a healthy breakfast are less likely to be overweight.

The USDA Child Nutrition Programs have the potential to impact over 31 million school children and thereby improve access to healthy, nutritious foods during an average school day. For many children in the Delta, the food eaten as snacks and meals at school may account for as much as 75 percent or more of their total intake for the day.

Recent reports from the Institute of Medicine, the American Academy of Pediatrics, and the Robert Wood Johnson Foundation have recognized that environmental factors affect individual behaviors related to food and physical activity. In many communities, for example, fresh produce is simply not available or affordable. Streets and parks are not amenable to exercise. And policies and economic choices make fast food cheaper and more convenient than healthier alternatives. Communities have made efforts to improve these factors in diverse settings and with diverse populations, resulting in many promising approaches.

The Agriculture Research Service has been collaborating with scientists in a tri-State region to improve the health of at-risk rural populations in the lower Mississippi Delta, where the prevalence of nutrition-related chronic diseases, including obesity, is much higher than in the rest of the United States. ARS is coordinating this research with the 1890 Land Grant Universities and an additional university in Arkansas, Louisiana, and Mississippi. The prevalence of many nutrition-related health problems is greater for minority, rural, and low-socioeconomic groups which have led to the designation of at-risk populations.

The Delta is one of the regions of the U.S. which clearly exemplifies the designation of at-risk and has great potential for USDA and ARS and other governmental agencies to study the effects of nutrition and health strategies, including the effects of Child Nutrition Programs related to improving the lifestyle and the prevention of obesity. The ability of ARS to engage in long-term research is particularly appropriate. Additional details of our research are included in my written comments.

We know that in the Delta, as in much of the U.S., children and their families are not following the U.S. Dietary Guidelines for Americans, which are positioned to provide recommendations for a healthier lifestyle. As compared to the recommendations, they are eating fewer servings of fruits and vegetables, more refined grain and fewer whole grains, more high-fat dairy and high-fat meats, more discretionary calories, especially sugar, and they are not exercising up to the recommendations of the dietary guidelines.

Many children in the Delta have not experienced a wide variety of fresh fruits and vegetables and are less likely to eat new fruits and vegetables when seen for the first time. This underscores the need for the Fresh Fruit and Vegetable Program in every school.

My testimony is intended to show the breadth of the problem as well as suggest some solutions that are working and some that are still being tested. The most important thing we can do is to begin to involve children, families, and communities in being part of the solution, and I am happy to report that is beginning to happen, the most important of which is that, as a nation, we must begin to put nutrition in its rightful place as regards to health and health care in the United States.

Thank you for the opportunity to appear before you today to discuss the reauthorization of Child Nutrition Programs, and I look forward to answering questions that you may have after the rest of the panel's testimony. Thank you, Senator Chambliss.

[The prepared statement of Ms. Bogle can be found on page 57 in the appendix.]

Senator CHAMBLISS. Thank you very much.

Mr. Huddleston.

STATEMENT OF RICH HUDDLESTON, EXECUTIVE DIRECTOR, ARKANSAS ADVOCATES FOR CHILDREN AND FAMILIES, LITTLE ROCK, ARKANSAS

Mr. HUDDLESTON. Thank you, Senator Chambliss. My name is Rich Huddleston. I am with Arkansas Advocates for Children and Families. We are a nonprofit, nonpartisan child advocacy organization. Our mission is to ensure that all children and families have the resources and opportunities they need to lead healthy and productive lives and realize their full potential.

Even though she is out of the room, I did want to congratulate Madam Chairman Lincoln for taking over the reins of this committee and to say how proud we are back home to have such a strong leader in helping vulnerable children and families.

Let me start by painting a picture of poverty in Arkansas. One in four Arkansas children is poor. Arkansas ranks among the four worst States nationally——

Senator CHAMBLISS. She is back now, so you can say nice things about her again.

[Laughter.]

Mr. HUDDLESTON. Arkansas ranks among the four worst States nationally in overall poverty, with roughly one in six residents living in poverty. No matter how hard they work, fully half of all Arkansans don't make enough to fully support themselves, and the current economic crisis is not making things any easier.

Nationally, about six million households with children struggle against hunger. Children in these households also tend to have poorer health outcomes and face barriers which make it difficult for them to succeed in school and become productive workers and adults. One of the best things Congress can do to support struggling children is to strengthen the Child Nutrition Programs when it reauthorizes them this year. These programs have extraordinary reach. More than 31 million children eat a meal provided through the School Lunch Program on a typical day. By providing nutritious meals to children and making it easier for low-income families to make ends meet, the School Meals Programs reduce poverty and food insecurity and shrink the educational achievement gap for our most disadvantaged children.

Unfortunately, millions of children who qualify for free school meals don't receive them. When Congress reauthorized the Child Nutrition Programs in 2004, it required school districts to use direct certification to automatically enroll school-age children in households that receive Food Stamps. But not all districts conduct direct certification equally effectively. The USDA estimates that 3.5 million out of the ten million children who were eligible for direct certification at the start of the 2008-2009 school year weren't directly certified.

Our goal should be to automatically enroll every single child who is eligible for free meals in a timely manner. Working toward this goal will bring about three important benefits. First, needy children will get the food they need and their parents won't have to complete duplicate paperwork.

Second, program integrity will be strengthened as schools rely on data that have already been scrubbed by other means-tested programs instead of the paper-based applications that are prone to errors. This will help ensure that taxpayer dollars are spent wisely.

Third, schools will have a lower administrative burden, which will free up resources they can use to provide healthier meals or to enrich academic opportunities.

I am going to discuss two ways in which Congress can improve access to free school meals. The first is to allow schools with large concentrations of poor students to serve free meals to all of their students rather than spend time identifying the very small number who don't qualify. The school's Federal reimbursements would be based on the results of direct certification. If a school directly certifies more than 40 percent of its students, generally more than 80 percent of its students qualify for free or reduced meals anyway. So if the school agrees to serve all meals free, it shouldn't have to process applications or check eligibility in the cafeteria. Nationwide, six million children attend schools where more than 80 percent of the students qualify for free or reduced meals.

The Senate bill that includes this proposal is entitled the Hunger-Free Schools Act. These schools will be literally hunger-free spaces. All children will be eligible to eat breakfast and lunch free of charge. Congress, in short, would eliminate administrative hurdles that get in the way of effectively feeding poor children.

The other way in which Congress can improve access to free school meals is by allowing schools to automatically enroll in free meals any student receiving Medicaid. This would help ensure that the poorest children receive free meals regardless of where they attend school. Children in households receiving Food Stamps have long been eligible for free school meals. This makes sense, since these families have already proven that they have low incomes through the rigorous Food Stamp enrollment process. The same is true for parents who have enrolled their children in Medicaid. They shouldn't have to complete a duplicate application for school meals and schools shouldn't have to process unnecessary paperwork. Congress should permit the school systems and States to work directly with Medicaid agencies to use income data from Medicaid to automatically enroll children for free school meals. An estimated two million poor children participate in Medicaid but not Food Stamps.

In conclusion, I know the committee has received many proposals as part of this reauthorization process, but I believe the two proposals I have described today offer a big bang for the buck and thus deserve high priority.

Thank you again for allowing me the opportunity to testify before this committee today.

[The prepared statement of Mr. Huddleston can be found on page 63 in the appendix.]

Chairman LINCOLN. [Presiding.] Thank you.

Ms. Sanders.

STATEMENT OF RHONDA SANDERS, EXECUTIVE DIRECTOR, ARKANSAS HUNGER RELIEF ALLIANCE, LITTLE ROCK, ARKANSAS

Ms. SANDERS. Chairman Lincoln, Senate Committee members, staff, and other honored guests, it is an honor to actually be able to speak to you today concerning childhood hunger and the Child

Nutrition Act. I am the Executive Director of the Arkansas Hunger Relief Alliance.

We are an association for the food banks in the State and for all of the local hunger relief organizations and hunger advocates. We have over 100 members in the Alliance and over 900 organizations as part of our network. We are truly a united voice in Arkansas to end hunger. We work to raise the level of awareness concerning hunger in Arkansas, advocate for public policy concerning hunger and feeding programs, and to secure funding. We believe the ability to provide an adequate diet to all Arkansans requires the collaborative effort of government-sponsored feeding and nutrition programs, a diverse and capable charitable food system, a healthy, thriving private sector, and strong public policies that support moving families from poverty to self-sufficiency.

This morning, I just want to address three specific areas about childhood hunger: Briefly, the state of childhood hunger in Arkansas; childhood hunger related to health and obesity; and finally, some of the gaps that are in the provision of nutritional services to children.

Arkansas is a low-income rural State. Fifteen-point-nine percent of our households in Arkansas are food insecure. Over half of the 464,000 public schoolchildren in Arkansas receive free or reduced-price lunch. The Feeding America Food Banks that are part of the Alliance serve over 300,000 people a year. Of these 300,000, approximately 40 percent of them are children.

We are, as you mentioned earlier, currently ranked third in the nation for the highest incidence of hunger. It is a reality for many of the people in our State that they live with daily, wondering where their next meal will come from. We have seen this rate of food insecurity increase, and it has actually played its way out in recent studies that the Arkansas Children's Hospital has been a part of through the Child Health Watch Program that has shown a drastic increase in the number of children reporting to the ER that are suffering from food insecurity. It has jumped from last year at 10.7 percent all the way up to 2008, it jumped up to 22.2 percent reporting incidences of hunger. These are extreme increases.

We know that Arkansas is not the only State in the nation struggling with poverty, poor health outcomes, and low educational attainment, but we do know that hunger is a direct contributor to each one of these. But hunger is a curable problem.

Thanks to research of many organizations, like Feeding America, FRAC, Robert Wood Johnson, we have shown that there is a clear correlation between hunger and poor health outcomes and hunger and obesity. It is rather startling when you read some of the numbers from studies that show that toddlers who have suffered from food insufficiency at any point in time before their fourth birthday are 3.4 times more likely to be obese at 4.5 years. Those are rather startling facts when you consider that the families most likely to suffer from food insecurity are those with young children who are trying to make ends meet and getting their careers and their lives started.

So it is very clear that there are things that we need to do in addressing the overall health outcomes of children who may suffer from food insecurity. Government-sponsored programs like School Lunch, Breakfast, WIC, After School, and Summer Food clearly have a role to play, and it is important for us to expand access, make it available, and also to keep high nutritional standards for these programs, nutritional standards like the ones that Senator Harkin has recommended for all school foods.

In Arkansas, we have been fortunate to do some of that. Thanks to legislation in 2003, I was able to be on that committee and we worked to set some very high nutritional standards for all foods in the State that are provided in the school. It has been very successful and Arkansas has been the only State in the nation to halt the progression of obesity amongst their children. Now, while these things weren't directed specifically at hunger children, the effect is the same. Hunger children need nutritionally high items to eat as much as any other child needs.

I want to touch very briefly on some things that the Charitable Food System is actively involved in and some ways that we can help all programs. The Charitable Food System is involved in many ways with After School and with Summer Feeding. Those programs need to be streamlined. They can often be difficult to manage. The After School Program that was mentioned earlier, where after school suppers are provided in 14 of the States, that should be looked at being expanded to where all States have access to do that.

But finally, the one Charitable Food program that food banks are involved in throughout the nation that has no Federal support is the Backpack Program. This program was actually initiated in Arkansas with a school nurse that called one of the local food banks and said, you know, we are getting children in here with tummy aches and headaches and they can't function in their classroom and we finally figured out that it is because they are hunger. So they started putting together backpacks of food. These items were provided through the food banking system. They are items that are easy to prepare, single-serving meals, and they go home with them in a low-profile backpack on the weekend.

Well, these foods can be expensive and the food banking system and the Charitable Food System juggles the cost of these items and the nutritional value that we want to send home with children on those weekends. This is a program that could benefit from you looking at some pilot programs to look at ways to implement this in a cost-effective manner, to institutionalize this so that it is available to all schools, because the one issue that we do hear is that there are lines, there are waiting lists for children who want to get on this program all over the nation. So it could be a very good way to bring more food to children on the weekends when they are going hungry.

I want to close with a story about a Backpack Program from Jonesboro, Arkansas, from our food bank there. After the food bank of Northeast Arkansas began a Backpack Program, the Executive Director did a site visit to one of the schools to monitor the program's progress. The school counselor shared the story of a young boy who was so excited to get his first backpack of food that he sat down in her office and started going through it right there. He opened up the backpack and there were two fresh red apples right on top.

He reached in it and with a big smile handed it to the counselor. The school counselor said, “Oh, put that back in your backpack. All of that food is for you. Isn’t that wonderful?” And his smile kind of faded and she thought, what is wrong? So she asked him and she was totally unprepared for her answer. He looked at her and he said, “But I have never had anything that was mine to share. I want you to have this apple.” So who would have thought that something like giving a child an apple in a backpack would provide such an opportunity to that child to be like so many of the other children, to have the joy of giving and the joy of being a part of something.

So what we are doing in feeding children through the schools and the things that we are providing them are giving them so many long-term opportunities to be successful. I applaud what you have done with the extension to the Child Nutrition Act. We think that the things that are there will give us a chance to pilot and to model some opportunities for the future. I look forward to working with you in any way possible. Thank you.

[The prepared statement of Ms. Sanders can be found on page 72 in the appendix.]

Chairman LINCOLN. Thank you, Rhonda.

Ms. Smith.

STATEMENT OF JENNIFER SMITH, DIRECTOR OF COMPLIANCE, WAL–MART STORES, INC., BENTONVILLE, ARKANSAS

Ms. SMITH. Chairman Lincoln, Ranking Member Chambliss, and distinguished members of the committee, on behalf of Wal-Mart and our 140 million weekly customers, I am honored to testify before you today.

My name is Jennifer Smith and I am the Director of Regulatory Compliance based at our home office in Bentonville, Arkansas. I would specifically like to address the WIC program and two issues we have identified that should be addressed in the upcoming reauthorization: The program’s transition to Electronic Benefits Transfer, or EBT, and the importance of standard operating rules, and the new food packages and the need for one place where retailers and manufacturers can access information about all approved foods.

Wal-Mart supports the President’s goal of ending childhood hunger by 2015. We have partnered with the Feeding America Network to donate food from our locations around the country, and we expect to donate more than 90 million pounds of food by the end of 2009.

Possibly the most significant advantage we have is our ability to source and sell safe and high-quality food products at the most competitive prices, which helps our customers save money so they can live better.

We are the largest grocery retailer in the United States, with stores in many communities, Tribal areas, and all 50 States. We are currently processing more than four million WIC transactions on a monthly basis, approximately 400,000 over the same period last year. As you might imagine, we are looking for the most efficient way to process WIC transactions while providing the highest level of customer service to everyone.

First, I would like to address the transition to EBT. The existing paper voucher system is one of the most complicated, time consuming, and costly transactions conducted at our point of sale. The paper transaction process spotlights the WIC participant, creates confusion, frustration, and sometimes confrontation between the customer and the cashier, and requires participants to separate WIC foods from their other groceries, all potentially adding to the stigma associated with receipt of these benefits.

Like others in the retail community, we support the transition of WIC benefits to EBT. The SNAP Program's transition to EBT has positively impacted the SNAP recipients' shopping experience, retailer efficiencies, and fraud reduction. We are eager to see these same positive outcomes for the WIC Program. We believe that standardization of WIC EBT will help bring efficiency to the transactions and help create administrative savings for the program that could be redirected to provide more WIC benefits to those in need.

While it is important to allow for technological innovation and creativity, there are times when all relevant stakeholders should coalesce around a common set of technical standards to ensure a successful implementation. The USDA FNS should be commended for beginning work in this regard, and we encourage the committee to mandate development of one set of technical standards and operating rules for WIC EBT in the upcoming reauthorization. In 2002, Congress addressed the need for similar standardization with the SNAP EBT.

Wal-Mart has participated in WIC EBT developments with several States involving the two prevailing technologies, the Smart Card, or offline approach, and the online magstripe approach. After testing and implementing both technologies, we can say with confidence that the Smart Card technology has been the best performing WIC EBT system to date.

When Congress issued the initial EBT mandate for SNAP, it was not conditioned on interoperability. This created problems in places like Washington, DC, New York City, and Southern Ohio, where SNAP recipients commonly shop outside their home States. We believe the ability to use and to accept WIC EBT cards at any WIC authorized retail location in any State goes hand-in-hand with standardization. Without standardization and interoperability, we believe there would be an unnecessary increase in State and retail costs and unnecessary restrictions placed on the shopping options of WIC participants. In addition, interoperability would be essential in times of natural disaster, when WIC participants are displaced from their home States.

Second, I would like to address the new food packages. While we supported the modernization of the packages, it is important to note that the former packages had only about 500 approved food items. The new packages have approximately 12,000 items to date. Given the added complexity, it would be helpful if there were a centralized resource identifying all eligible products under the program. This would help retailers meet their obligations as WIC vendors to stock the required WIC-approved foods.

We have heard from our suppliers and others in the retail community that there is a significant need for a universal set of guidelines or criteria that WIC authorities could use to approve products for the program. We would support a provision in the upcoming reauthorization that authorizes and funds the development of a centralized database within USDA to manage a list of all eligible products under the program and make universal criteria used to approve products for the program available to retailers and manufacturers.

In closing, I would like to thank you for the opportunity to testify here today. Congress has an unprecedented opportunity to bring uniformity and standard operating rules to the program, which will bring costs down, improve program efficiencies, and help simplify the shopping trip for moms. The retail community looks forward to working with you on the upcoming Child Nutrition reauthorization legislation.

[The prepared statement of Ms. Smith can be found on page 78 in the appendix.]

Chairman LINCOLN. Thank you. Thanks to all of you.

In deference to my colleague, I know he has got somewhere he has to be, so I would like to turn to him first for any questions he may have of you all and then we will continue. Senator Chambliss.

Senator CHAMBLISS. Thank you, Madam Chairman. I appreciate your indulgence and your cooperation, as always.

All of you have given us good practical issues to look at, and very honestly, you have given us some very good practical solutions to those issues, and I am appreciative of the way you all have delved into this issue. In fact, Ms. Smith, you just answered my question that I was going to ask you relative to some of the practicalities of the WIC program. And, gosh, going from 500 to 12,000 items, I can see we have got a little work we have got to do there. Your suggestion, I think, is well taken.

Dr. Bogle, as you know, childhood obesity rates are staggering. Of course, the problem is beginning more and more at earlier ages now. The rate of obesity for children entering kindergarten seems to be the same it is when they complete kindergarten, if I remember my numbers right. In your research, have you found any effective interventions aimed at parents and caregivers to help them be more aware of childhood obesity issues as well as providing tools to help prevent or reverse this in the home?

Ms. BOGLE. Thank you, Senator Chambliss. We are working on that, absolutely. And the one comment I wanted to make in regard to other things that have been said, you know, it is not just the schools. It is the families, and particularly when we talk about these preschool children, many of them are not enrolled in school programs where they might get information and parents might get information about better feeding choices.

In reference to what Rhonda just said about the preschool kids and the increase in obesity in the zero to three, part of that problem is the fact that for those children, the source of calories for them oftentimes—most of the time—are foods that do not have or are not high in nutritional quality—heap calories, both fat and sugar-related items, but not other items.

For instance, it is very difficult for families in rural areas, low-income families, to find ways of preparing fruits and vegetables for their children—in the zero to three, I am talking now—unless they are just buying the baby foods, the commercial foods that are already on the market, which are more expensive than they would be if they were using some of the foods that the rest of the family is eating. But it is more difficult to get that job done.

I think, unequivocally, what we are seeing in the rural communities, and that is where I have spent most of my time so that is what I will talk about, is the involvement of families, particularly grandparents. Now, in the Delta, we have a lot of grandparents that are raising grandchildren and they are living in these rural areas again and they are becoming one of the biggest advocates for the prevention of obesity of not only their grandchildren, but great-grandchildren and others to come. So we think that part of what we are seeing is if we can involve the schools, the communities, agencies within the communities, families, even extended families, and the children themselves when they are old enough to know what we are trying to tell them about, is the best way to go, because it is not just a single item. It is a very complex issue.

For instance, this whole idea of physical activity, I know a lot of people think that those of us who live in rural areas just have ready access to all kinds of physical activity, but it is not the case anymore. It is very unsafe in many areas for children to even play outside their homes. So we are not just talking about the lack of exercise facilities, but we are talking about the safety of areas where they might exercise.

So I think that the other thing we are seeing is that different segments of the society—and we know from the report released yesterday on food insecurity that there are groups within our society that are at higher risk of food insecurity—those same groups, it turns out, are at higher risk of obesity for their children. Some of that is cultural, and so we must begin to make some kind of efforts to inform our citizenry about some of the differences in culture and health issues for their children. So that is really what we are trying to work on in the Delta.

Senator CHAMBLISS. I am glad to hear you say that the adults that participate in your study are becoming more cognizant of the way food is prepared, because I am sure Arkansas is very much like Georgia, and I live in a rural part of our State. If there is any question about how to prepare it, you batter it and you deep fry it——

[Laughter.]

Senator CHAMBLISS. —and it is pretty darn good, whatever it is——

Ms. BOGLE. It is tasty——

[Laughter.]

Senator CHAMBLISS. —but it is probably not the healthiest way to prepare it, so that is encouraging.

Well, I want to thank all of you for your testimony and we look forward to staying in touch and dialoguing with you as we go through this reauthorization next year.

Thank you, Madam Chairman.

Chairman LINCOLN. Absolutely. Well, a special thanks to Senator Chambliss for covering as the votes were going on and certainly for working with us on this critical issue. He is always there, and he and his staff both are wonderful to work with, so I am grateful to him.

I want to take my personal time here to be able to welcome you all to the committee and, again, your voices in this very critical issue that we face in terms of child nutrition and really getting it right. We know that we have to start at an early age and it is not just what we put in front of them, but it is what we teach them, and that is critical.

So, Dr. Bogle, thank you for all of your work as Executive Director of the Lower Mississippi Delta Obesity Prevention Research Unit. You all do tremendous work there, not only in terms of what children eat, but also looking at how we can teach them so many other things.

We are so very grateful to Rich Huddleston, whose tremendous years of service to children across the State of Arkansas, now as Executive Director of the Arkansas Advocates for Children and Families. You have just been a great resource to me and I am grateful for all of your hard work and the things that you have done.

Rhonda with our Hunger Alliance, we appreciate—I should say Ms. Sanders, sorry—for all your work with the Hunger Alliance and what it means. Those Backpack Programs, listening to those stories is unbelievably meaningful, and to see what it has meant in the lives of those children and to think that it was just from a school nurse who really thought that there has got to be a better way to help these kids over the weekend, and when our Hunger Alliance and our food banks came to the rescue and said there is a better way, we are going to work and we are going to work to improve upon it. So we are grateful to you all.

And Ms. Smith, thank you, because Wal-Mart does a wonderful job, not only in our communities in providing for our families a way to—and a very economical way to provide for families, but they also share their information with us in helping to figure out a better way to get families what they need. The information that you all have in terms of the customers that you serve is really critical for us in getting it right and making it a simpler process and one with integrity and respect, and that is so critical, as we all know. We are all put on this earth to look after one another and there is a right way and a wrong way to do that, and without a doubt, the respect is a critical part of what we want to do here in the committee as we design these programs for our fellow man, and particularly for our children.

So I appreciate it and am particularly proud that this panel is here today and feel like you have already offered a great resource in terms of your knowledge, but look forward to continuing to work with you.

Chairman Harkin did a tremendous job, along with the staff, in really teeing up what we need to do on child nutrition and we are looking forward to bringing that to fruition in the bill shortly after the new year so that we can move forward and really get down to the business of what we want to do, and that is making sure that our children are healthy in this country.

Just a couple of questions, if I may. Dr. Bogle, in your testimony, you note that food insecurity can have a negative impact on academic performance. Children that don't eat breakfast have lower scores in school. It is why so many of our schools are providing food for children on days when it is standardized testing. But without a doubt, with those Breakfast Programs, it is important for us to be creative and inventive in making sure that children have good nutrition in the mornings and making sure that there is a way that they can get it. I have got teenage boys now, and they don't like to get out of bed in the morning, so we need to make sure that it is something that is deliverable to children.

But what about the relationship between poor diet, especially overweight and obesity, and academic performance? Do we have any research that conclusively demonstrates that poor diet or obesity also contributes to low test scores? Is there anything, whether it deals with both the diet and the health of the child or the self-esteem?

Ms. BOGLE. Senator Lincoln, I am not sure that there is a body of research out there specifically dealing with the academic performance of obese children. It is certainly an area that needs some research and looking at. I think in many ways, the obese child has been ignored, more or less, in this whole health issue while professionals like myself fussed about whether obesity was a disease or wasn't a disease.

So I am not sure that there is, but I will tell you this. Arkansas is in a good position to give you some information about that based on the BMI studies that they have in the State, and I am sure that Dr. Thompson would be willing to give us that information and I will get that back to you.

But just one brief thing is this. We do know about the extreme connection between obesity and health. So we don't really have to look for a lot of other reasons until you study whether or not the obesity makes a difference in the academic scores. We know that the unhealthy children don't do as well.

Chairman LINCOLN. But it gives us, I think, an added advantage of being able to seek out the solutions to that issue, because there are multiple effects, obviously.

Ms. BOGLE. Right.

Chairman LINCOLN. Obviously, health, but without a doubt, if it is absenteeism or if it is low self-esteem that is causing those poor grades, that is yet one more thing that we could correct, I hope, in terms of addressing obesity through better nutrition.

Ms. BOGLE. I agree.

Chairman LINCOLN. I also appreciate your discussion of the environmental factors that constrain or contribute to individual behaviors regarding food and physical activity choices. When we talk about helping people make good choices, we need to understand that their choices themselves are often limited by outside factors. I know when my husband and I left Little Rock the other day headed to Lee County, we stopped in Brinkley to get some gas, and the boys were hungry and wanted a snack and we walked into, really, almost the only place there to get food, and there was plenty of unnutritious food.

I hate to use too many terms, but—and then I noticed on the counter there was a small bowl that had two rotten bananas and a small kind of shriveled-up apple, and I realize that what you have talked about there in terms of access in rural areas, we call them food deserts. They are something, really, that both rural areas and inner-city areas share in the fact that it is much more difficult to find fresh fruits and vegetables and nutritious foods, and that is something hard for most people to believe here in Washington.

Those that didn't grow up in rural America, they don't realize it, because they think rural America is where all those fresh fruits and vegetables come from, on the farms that are there. They don't realize that sparse areas sometimes lead themselves to very few availabilities in terms of the kind of nutritious foods that we want and need.

Maybe you might just touch on our need to understand that the choices themselves there are almost limited, and whether it be that the nearest supermarket is 30 miles away or the kids can't walk to school—you mentioned a little bit about the safety of it—but is there something there? Can we talk a little bit about how you coordinate your research with other Federal agencies that also have a role in health promotion policy, exercise, and other things? Do you think there are additional steps or actions that the government could take to coordinate those policies across programs and agencies?

Ms. BOGLE. I will say two things to that. Certainly, you have described the one place that I know in Brinkley to eat——

[Laughter.]

Ms. BOGLE. The catfish is really good, but you can only get it fried.

[Laughter.]

Ms. BOGLE. But there are other issues there where most folks don't understand that we don't have a Wal-Mart Super Center in every rural community in Arkansas, Louisiana, or Mississippi, which would be great. And so it gets down to sort of mom-and-pop stores, and when you go in—and we do this on a frequent basis—the quality of the fruits and vegetables are not—the fresh ones—what they should be, the reason being, of course, that they have been trucked long distances and then they sit there because it is expensive for that store owner to buy in the first place, so he is going to let them lay there as long as he hopes to sell them, I guess.

And so it drives us many times to say, well, if not fresh fruits and vegetables, let us look at canned or frozen. And some people don't understand that when we recommend canned and frozen fruits and vegetables, but certainly that is better than just eating the fried things that may be more available.

As to the cooperation at the Federal level or at the State levels, Secretary Vilsack mentioned earlier the efforts that are going on here between the Department of Education, the Department of Defense, and the Department of Agriculture. I think that is all very good. And, of course, he is really stepping up to the plate with his economic development. I have always maintained that nutrition had an economic development arm. We just need to promote it more.

I think that if we teach the families in these rural communities to each more fresh fruits and vegetables and the little mom-and-pop stores provide them, the families will buy them and it would be a win-win situation for both of them. But it is going to take the cooperation of a lot of different agencies and a lot of different folks in all communities to get that done.

Chairman LINCOLN. Is there any one or several interventions or sets of interventions that you feel have had the biggest impact on the health of the participants, or would you feel like had the most promise for replication elsewhere? Is there any one thing that comes to mind?

Ms. BOGLE. I would just mention two. One, we developed, in addition to a food choice testing to see whether or not young children in an elementary school in Mississippi would even try fresh fruits and vegetables that they did not know or weren't accustomed to, we associated that with the development of a soccer team, or soccer teams in that elementary school for the kindergarten through third grade, now realizing, again, that is an area where the children don't normally participate in organized physical activity. And they didn't know what soccer was in this school, of course, or what kind of a ball to use.

But to make a long story short, they loved it. And when we left there, when the research was over—and to us, this is the gratifying thing, that if we can do some research that is sustainable in those communities once we leave, then we know we are on the right track. But they incorporated the soccer program into their elementary school program as we left, and more and more children are getting the benefit of that.

It also made a difference in their school lunch in that as we were doing the research to see whether or not the children would actually try these fresh fruits and vegetables, we used that in conjunction with the School Lunch Program and the Snack Program so that they were able to see that just minor changes in what they were doing and involving some women from the community and helping to get them prepared would make a difference for those children.

Chairman LINCOLN. So coordinating those activities, those sports with the feeding programs. I know that has been something that we have really looked at in the Summer Feeding Program because it is so difficult to implement those programs.

Ms. BOGLE. They need—so far as obesity is concerned, it is going to take both, you know, physical activity and good nutrition.

Chairman LINCOLN. Exactly. Well, thank you so much, Dr. Bogle.

Rich, thank you for being here. We appreciate so much what you have done. You are very positive on the actions of this committee that was led by Chairman Cochran and that he took in 2004 when it required the State Child Nutrition Agencies to directly certify for school meals children who are already participating in the Supplemental Nutrition Assistance Program. Some people forget what SNAP is, so we kind of like to word it out there a time or two.

But your testimony also notes that of the ten million children eligible for direct certification in the 2008–2009 school year, only 6.5 million of them were directly certified. Can you provide the committee some explanation as to why so many children were missing out on that direct certification? And when it is supposed to be—I mean, it is supposed to be an automatic process, I mean, why are we missing so many? And can you also make some suggestions as to how we can improve that State performance in direct certification?

Mr. HUDDLESTON. Sure. Well, the good news is that USDA has done some very helpful research to identify these factors and to really offer some positive solutions. I mean, one of their findings was that the most effective way to really reach kids through direct certification is for the Food Stamp office and food districts to use computer matches. And believe it or not, there are still a lot of States out there who are trying to do direct certification, but basically what happens is that instead of doing a computer match, the Food Stamp agency will send paper applications to the homes of their Food Stamp recipients and ask the parent to fill it out and then return it to the school. Well, that really kind of defeats part of the advantages of doing direct certification, when you have access to computers.

The second suggestion they had was to do these matches more than once during the year, because obviously families become poor after kids start the school year. And so we may be missing kids if we don't do matches more often. I mean, so that was another suggestion they had.

And then finally, it is really important for States that aren't doing well here to really kind of consciously step back, sit down and look at the reasons why they are not reaching kids through direct certification. I mean, it is real important that they work with USDA to really figure out these reasons, and believe it or not, State agencies get busy sometimes and they don't have the time or don't make the time to really kind of sit back and do that kind of analysis.

I think the good news is that for low-performing States, Congress provided in the 2010 Agricultural appropriations law some grants for low-performing States that really should help motivate States to identify improvements and provide them with the resources to implement these improvements.

The Hunger-Free Schools Act, which is obviously still not law yet, includes other provisions that would help improve direct certification. It would include bonuses for States that are performing especially well or that show significant improvement. It would also require States that don't perform well to write and implement improvement plans.

So there are things that States can do already and there are steps coming down the road that could also improve the ability of States to be effective here.

Chairman LINCOLN. So incentivizing them is helpful, it sounds like.

Mr. HUDDLESTON. Yes.

Chairman LINCOLN. You mentioned a proposal that would allow schools in high-poverty areas to just offer free meals to all students and just skip the regular paper application process. Could you tell me what that might mean in our State of Arkansas?

Mr. HUDDLESTON. Sure.

Chairman LINCOLN. How many schools would be eligible?

Mr. HUDDLESTON. In Arkansas, there are about 250 schools in which more than 80 percent of the students are enrolled for free or reduced meals in those schools. And you add those kids up, that is about one in five Arkansas students who attends one of those 250 schools.

Schools that participate in a universal feeding option like this would see a major reduction in their paperwork. They would not have to process applications, or they wouldn't have to go regularly verify eligibility for a sample of the enrolled students. They wouldn't have to take payments in the cafeteria or track which students qualify for free meals on a daily basis. The administrative savings—I mean, the simplifications would allow school staff to really focus more on either providing more nutritious meals or on improving their educational programming.

So this is a real important step that could really be a big benefit to these schools, and not just to mention from the perspective of a student. It really would reduce the stigma that students have to go through on a daily basis. I mean, kids are very conscious about who is wearing the best tennis shoes and the best jeans and all that. Well, the flip side of that is that kids know who is having to fill out paperwork for these meals. So no student should have to go through that stigmatizing process in order not to go hungry. Yes.

Chairman LINCOLN. Thanks——

Mr. HUDDLESTON. And not to mention the fact that if you did this, you would reach a lot of students who maybe don't qualify now, but because if the school was serving all of the students, you would have folks at 190 percent of poverty, 200 percent of poverty, 210 percent of poverty who are still struggling to make ends meet day to day but who would also benefit from free meals.

Chairman LINCOLN. Right. Well, I visited with a school—I went to the lunchroom with some students in St. Francis County, which is in East Arkansas, and it was amazing not only to the stigma that children get, but the position it puts those school cafeteria workers in when they have to ask a child. They don't want to do that. They don't want to put that child in that position. They know what it does to their self-esteem and they know that it might cause that child to turn and walk away or not come back to the cafeteria the next day. So, I mean, it is beneficial for everybody, not just the kids, but the workers, the community, and certainly the school and being able to really put their resources where they can be most effective on behalf of the children.

But thank you for your work. We are so grateful to you.

And, Ms. Sanders, thank you. In your testimony, you mentioned that our State is a low-income rural State. People, again, in Washington oftentimes that look at this issue just on paper have such a hard time understanding that children or families in rural areas have a difficult time getting nutritious foods. They think that is where the bounty is. It comes from rural America. Why is it so difficult for those families that live in those areas?

But it is not only that you live further from perhaps the delivery point, which is the grocery store, where you are going to get the majority of your access, but you also live out in that country where you are farther away from the human services agency, certainly the nearest food pantry, which may be difficult to get to, which is usually in town, not out in those rural areas and those rural routes.

And your child is going to live farther from the school that they attend, so they are going to be on a bus. They are going to be in transit more time than other students, as well. They may miss the Breakfast Program because it takes them too long to get to school, or they may miss the after school snack because they have to leave early enough on the bus to get home.

So those are a lot of other things that factor into that issue, and I think it is so important for those of us that have lived out on a county road. We know what those challenges are, and it is so important for us to remember that because they are probably those that are more likely to be lower income and in a greater need.

I just want to ask, knowing that these challenges all exist in fighting hunger in rural areas, what advice or maybe recommendations you would give the committee about how we better address that particular food security need in rural areas.

Ms. SANDERS. That is an interesting question and there are some things that can be done utilizing the current government programs that could expand access, especially to children when they are not in school, which is one of the things that you mentioned.

For instance, the Summer Feeding Program, an excellent program, woefully underutilized throughout the nation, and part of that has to do with some of the ways that we have determined those meals have to be provided. First of all, they have to be provided in a congregate setting, which means everyone has to come there, sit down, and eat. Well, just as you mentioned, in the rural setting, it is not always easy to do. During the summertime, those children may not be able to hop in their cars and drive to the nearest place where they can all sit down together and eat that meal.

So I think there will be an opportunity to look at some new ways, some new pilot thoughts on can we maybe take the meals out more into the rural setting, some different methods of delivery. And I am hoping that with what you have done through the extension of the Child Nutrition Act, with some of that money for pilot thoughts of Summer Feeding, we might be able to find some pretty significant ways to expand those opportunities that are outside of that congregate setting that I think affect rural Arkansas, rurality throughout the nation. Those would be good opportunities to look at ways to expand those programs.

There is also, when we talk about eligibility to things like after school meals and summer school programs, currently, they use the area eligibility indicators of 50 percent on free or reduced lunch, and then those children are eligible for after school and summer meals. That could be reduced down to 40 percent. It has been lower than that even previously. But we could go back to that, which in Arkansas—I think I have attached the map to my written testimony—would significantly allow for more areas of the State to be eligible for meals after school, during the summer, those things like that are very difficult for rural Arkansas.

As far as for the Charitable Food Systems' involvement, things like the Backpack Programs or those where when we have the opportunity that we have the children to send boxes with them, once again, they are taking it with them. We are not having to worry about how to get to them. And they are having access to food, that we can be a part of that through this system is just a great way. And I know so many of them utilize the—so many of our pantries and agencies are involved in the Commodities Program, and those expansions provide lots of opportunities for families to have assistance with food.

Chairman LINCOLN. Well, I think just recognizing that it is a challenge is important. I know Dr. Bogle had worked on the aspect of doing almost a circuit rider-type delivery system, where trucks were going out to those county roads and providing fresh fruits and vegetables on a regular basis so that people knew that there was going to be a food service-type truck stopping by at a regular time and point where they could actually get the kind of nutritious foods that they would want and need in those rural settings if they didn't have access to being able to drive 30 miles into the nearest town where the nearest grocery store was. So there is certainly a lot there.

Just one last thing I wanted to ask you. You said that the data shows that children whose families are food insecure are more likely to be at risk for overweight and obesity.

Ms. SANDERS. Yes.

Chairman LINCOLN. You know, that just sounds counterintuitive. If you live in a household where you don't know where your next meal is going to come from, you would think that you would be eating less often, which you would think would reduce your risk of overweight or obesity. Either you are food insecure or you are overweight, not both at the same time.

But what your testimony suggests is just the opposite, and I think there is more. Not only can you be both food insecure and overweight, you are more likely to be overweight, and, of course, a lot of that goes to the types of foods that you eat.

Would you offer maybe some of your insight as to why you think this is the case, and how do we fight this twin problem of hunger and obesity?

Ms. SANDERS. I think you hit on several of the areas that we feel like are the cause for this. One is the availability of quality foods at a price that is affordable to low-income families. So they are struggling with, I only have so much money and how do I get those really good foods that are more expensive.

They are also struggling with—just oftentimes for a young mom or a caregiver, the emotional impact of dealing with all of those things that are hitting you at one time. So there have been some bodies of research and causes that have linked caregiver depression and the situations that they are in that are related directly to the child eating things that may not be the most nutritious for them.

And this data all came from the Children's Health Watch Project, of which Arkansas is one of the main sites for gathering information. So it has been very interesting to look at it and see how it correlates.

As far as to addressing the issue, obviously, increasing the nutritional packages, such as they have done with WIC and those programs, the things that we have done through the schools, through preschool—in Arkansas, as you know, we are getting a lot of three- and four-year-olds in preschool. So a lot of the standards that we are looking at for nutritious food and physical activity fit now within that preschool setting.

And it has been very interesting being—I am also on my local school board, so I get to hear a lot of the discussions bouncing back and forth between what the schools can do and what can be done for the health of children and balancing those nutritional items and teaching the kids the right way to eat and involving the parents. And whether people liked it and enjoyed it, sending the BMI letters home in Arkansas was awareness raising for the parents to get that in their home. It was uncomfortable in many aspects. It was hard to deal with. But once again, you talk about getting some parental involvement, they became involved at many levels at that point.

So I think the Head Start programs, when you go back to things that can be done and access to preschool, here you are once again dealing with three-and four-year-olds. They have got a strong program, more nutritional education and parental involvement. Once again, it gets to the sources of those families of young children that are struggling with how to feed their children, how to feed themselves, and how to make ends meet.

Chairman LINCOLN. But you make a good point, and we did experience that in Arkansas, the discomfort level among parents when they received information about their children that their body mass index was out of control. And many of them, I can remember the reaction was, you are telling me I am not doing a good job raising my children. And that wasn't what it was. It was clearly information to help them better provide for their children and to work at creating a healthier environment for their kids.

But it does go to the fact that information is key in making sure that parents are aware and they do have information. And it is a good way to get them involved. I know a couple of our school principals found that providing a steak dinner for the parents actually got the parents all to come to the school, and then she got their attention and was able to really convince them to participate in a lot of the school activities with their kids, which in turn engaged them in the ideas of not only what their kids were doing at school in terms of meals and other activities, but also at home. And so that is really important.

But we appreciate all your hard work and your outreach to the people of Arkansas who, particularly in these economic times, have tremendous needs. So thank you for being here today, too.

Ms. Smith, I am very interested to learn about your experience, obviously from the transition on the SNAP Program, but how we can also transition WIC. You have spoken an awful lot about that, transitioning WIC into the 21st century, especially by encouraging or mandating the transition to an EBT system. Could you talk a little bit more about your experience with the SNAP EBT transition and the benefits that occurred? I mean, you have talked a little bit about that, but clearly, being able to, in the volume that you all deal with, to be most efficient.

Ms. SMITH. Well, and I apologize, but my experience doesn't reside with that. I know that happened a few years ago, and that was really before my time with the company, so—but I can speak to you about the WIC EBT transitions we have been through and what we have seen in the States that have already fully adopted a WIC EBT platform.

Chairman LINCOLN. That is a good comparison, the ones that have and the ones that haven't.

Ms. SMITH. Say Texas, for instance, a fairly large State, we have seen increased engagement from our store associates in serving the WIC customers. It is a much more pleasant experience at the cash register point of sale. A colleague of mine for another company often refers to the cashier as having to act as the WIC police sometimes in a paper transaction. So with an Electronic Benefits platform, that type of confrontation is eliminated.

There is also a faster turnaround time in payment to the retailers with an Electronic Benefits payment platform. So on a paper transaction basis, you normally see float of maybe 30 to 45 days before a retailer might receive payment for WIC vouchers submitted to the State agency for payment. With WIC EBT, depending on the platform, you are paid either same day or next day at the latest. So that is an increased turnaround time for settlement purposes for the retailers.

It has also, I think, lessened administrative burden quite a bit. Many of the compliance issues that retailers face with the WIC Program are borne at the point of sale with the cashier or in the office, where we are processing the checks and submitting them for payment. So with an Electronic Benefits platform, those opportunities for error, either at the cash register or in the office, are eliminated. So you have less risk of compliance violations and less administrative burden following up on those compliance violations.

So those are some of the benefits that we have seen——

Chairman LINCOLN. Well, maybe you can—when you talked about standards earlier in your testimony, you can paint a picture for the committee of what is going to happen if the committee does require a national EBT system by a certain date but without national standards.

Ms. SMITH. We actually may see that scenario play out very soon in the State of Oklahoma, a neighbor to the State of Arkansas. The Cherokee Nation, a recent adopter of EBT for its benefits distribution for the WIC program, has implemented a Smart Card program, the offline program, and the State of Oklahoma, which obviously those jurisdictions overlap, is considering right now an online or magstripe program. The Chickasaw Nation, also in Oklahoma, is committed to developing an online program, as well. So very shortly, we will see just how well this mix of technologies may or may not work in a real world environment.

There are examples, though, of interoperability in Texas and New Mexico, neighboring States that both adopted the Smart Card, or offline approach to EBT delivery. Those two States—in the El Paso market area, there are a number of New Mexico residents who shop in the El Paso market area because it is closer for them to go there than somewhere else inside their own State to buy their groceries. New Mexico residents very easily use their Smart Card to purchase their WIC items in our Texas stores and it has been a very successful—it is a win-win for both the State of Texas and the State of New Mexico.

Chairman LINCOLN. Well, I thought I heard you in your testimony, you were saying that last year, you did 400,000, and then you went within the same period of the next year, you did four million——

Ms. SMITH. We went from four million to 4,400,000, so we increased approximately 400,000 transactions in a year's time.

Chairman LINCOLN. Okay. I was thinking, 400,000 to four million was a pretty big leap. I wasn't sure if I had heard that correctly.

Particularly in regard to the central database of products that are eligible for use under the WIC program, do you think there is a role for the private sector and the retail community in establishing a central database? And maybe you can help us understand the scope of a task like that, both in terms of establishing such a database, but also in terms of maintaining it. I mean, I would be curious to know how often new food products are introduced into the marketplace and how often are new WIC foods introduced into the marketplace and how much work would that be to maintain a real-time system that has tracked all those products.

Ms. SMITH. It is a very good question. Particularly with the WIC Program, it is much more onerous than, say, the SNAP Program, where you really have foods within the SNAP program—it is easier to identify the foods that are not eligible than the foods that are.

The WIC Program has very specific food requirements for its participants, whether it be package size requirements or nutritional value of the foods that are being purchased, those types of things.

Is there a role for the private sector to play? I think we play that role already today in that we are submitting the information about the products that we want to make available to the WIC participants. I think the challenge today is that because the process varies so widely between WIC authorities, it is difficult to come up with a uniform approach to submitting that information to WIC authorities, and that is a problem not only for the retail community, but the manufacturing community, as well.

I think that we want an easier way to submit the product information more quickly to one single location so that we can get that information out to all of the WIC authorities—it would be available for them, as well—to more quickly make choices about changes to their food packages or their approved food lists.

Right now, generally speaking, most WIC authorities review their approved food list once a year. It is typically in the fall in concurrence with the Federal fiscal year. So just last week, in fact, we got a request from the State of Pennsylvania to submit information about our Great Value brand products that would be available in the State of Pennsylvania for the 2010–2011 food lists. So they are already planning for next year's food items.

Chairman LINCOLN. Those are good suggestions.

Well, thank you all so much for joining us. I apologize for the interruption with the votes on the floor, but that is pretty commonplace around here, and I want to thank my colleagues. I think you hopefully noticed the level of attendance we had early on with the hearing. Members are extremely interested in this issue.

Senator Harkin did an awful lot of work and the staff did a tremendous amount of work early on in the Child Nutrition reauthorization, and we want to work diligently to do it in a timely way so that we can also get the maximum benefit out of our Federal resources. That means being sure that we get it done before the budget baseline changes. So we are going to be working hard to do that and we appreciate your input and look forward to working with you all as we move forward.

I think this is the fifth hearing we have had now on child nutrition, so we are working to come to a completion and be able to be ready to do something after the first of the new year.

But again, thank you all so much for your input here today, but more importantly, for the hard work that you do across our State in really dealing with the tough issues of food insecurity among our families and particularly our children at a really critical economic time. Hopefully, that translates up here and we can get some good work done on behalf of all those families.

So thank you all so much for joining us.

The committee is adjourned.

[Whereupon, at 1:05 p.m., the committee was adjourned.]

APPENDIX

NOVEMBER 17, 2009

Agriculture Committee Hearing
Opening Statement on Child Nutrition
Senator Robert P. Casey, Jr.
November 17, 2009

Hunger exacts serious tolls on the health and development of children and is associated with poor health, behavioral problems and developmental problems. Federal nutrition programs not only reduce hunger, they reduce poverty, prevent obesity, strengthen schools and child care programs and boost children's health, development and school achievement.

Ending hunger remains one of my top priorities as it cuts across all of the major challenges we are facing, including preventive health care, quality of life for families and the ability of children to take full advantage of educational opportunities.

I applaud President Obama's commitment to end hunger in America by 2015. This aggressive goal is both achievable and necessary if we are to truly bring change to lives of vulnerable families living in Pennsylvania and every state.

USDA's Economic Research Service yesterday released its annual report on Household Food Security in the U.S., which revealed figures that represent the highest level of food insecurity observed since nationally representative food security surveys were initiated in 1995. In 2008, 16.7 million (22.5 percent) children are living in food insecure households compared to 12.4 million (16.9 percent) in 2007. In 2008, 49.1 million (16.4 percent) Americans lived in food insecure households, compared to 36.2 million (12.2 percent) in 2007. The number of individuals who are food insecure increased 36 percent over 2007 and the number of children increased 35 percent over 2007.

Even when resources are inadequate to provide food for the entire family, children are usually shielded from the disrupted eating patterns and reduced food intake that characterize very low food security. However, children as well as adults experienced instances of very low food security in 506,000 households (1.3 percent of households with children) in 2008, up from 323,000 households (0.8 percent of households with children) in 2007.

The fundamental cause of food insecurity and hunger in the United States is poverty - marked by a lack of adequate resources to address basic needs such as food, shelter and health care. In Pennsylvania, 15.8 percent of children (439,153, almost half a million) were food insecure from 2005-2007, according to Feeding America, using USDA and other government statistics.

While USDA was releasing its study on food insecurity yesterday, I launched a tour across Pennsylvania for the exhibit Witnesses to Hunger, a photography project documenting hunger and poverty in Philadelphia. This project began at Drexel University in Philadelphia with 40 women capturing their daily struggle with hunger with digital cameras. The project has been expanded to women in Scranton and will continue to expand to capture the universal struggle with hunger.

In May, I had the honor of bringing this exhibit to Washington. I cannot begin to describe how moved I was to see the photographs taken by these women and hear their stories.

Their bravery and rare courage in sharing the struggles they face to provide a safe, nurturing home for their children will always stay with me. These mothers who brought Witnesses to Hunger to life are a constant reminder that the programs we in Congress advocate for, and the new initiatives we develop, can have a real impact on people's lives.

Too often in Washington, we are guilty of seeing the world in terms of sound bites, policy summaries and numbers. We know that well-fed, healthy kids are the lynchpin to many of the other big policy issues dealing with healthcare, education and the economy. The kids in school right now will be the workforce that will help us build new industries and jobs and transform our economy.

We need to invest in our children's future. Children who are hungry and malnourished cannot take full advantage of the educational opportunities presented to them. We need to ensure that our children will be able to take full advantage of the opportunities that come their way later in life. We need to make a real difference in the lives of American families.

I have introduced a number of bills aimed at increasing access to critical nutrition programs for the nation's most vulnerable children and families including: the Summer Food Service Rural Expansion Act to increase summer meals for students living in hard-to-reach rural areas; the Emergency Food Assistance Act to leverage the funding of food banks and the National Hunger Relief Act to help federal nutrition programs better keep pace with food cost increases.

Beyond increased access to food, I also support increased access to quality nutritious foods. I believe that proper nutrition is preventive health care and it is especially important to the growth and development of children. For this reason, I co-sponsored the Child Nutrition Promotion and School Lunch Protection Act to ensure that vending machines do not undermine the balanced nutrition provided to kids in school lunch.

I have also introduced legislation, with my colleague on the committee Senator Bennet, to use the innovative Philadelphia universal school meals program model as a national program to feed children, reduce bureaucracy and save money. The bill creates alternatives to the standard paper application process and meal claiming procedures for schools serving concentrations of low-income children during breakfast and lunch. Specifically, the bill allows schools that agree to serve breakfast and lunch free to all students for five years to be reimbursed based on socioeconomic data rather than individual applications. The school gets administrative relief in exchange for covering any costs that exceed federal reimbursements. The current system is inefficient and outdated. The pilot program in Philadelphia illustrates how the successful modernization of feeding programs can ensure that students receive nutritious meals. I hope to bring the Philadelphia universal school meals program to the national level so that more children can benefit.

As it comes time to reauthorize the Child Nutrition Act, I remain committed to increasing access to school meals and nutrition education for school children.

Williams, Jessie (Agriculture)

From: Roy, Syane (Gillibrand)
Sent: Wednesday, November 18, 2009 10:57 AM
To: Williams, Jessie (Agriculture)
Subject: Senator Gillibrand's Opening Statement for Child Nutrition Hearing

Opening Remarks for the Senate Hearing on the Child Nutrition Reauthorization

Thank you Chairwoman Lincoln for holding this very important hearing today.

I would like to thank Secretary Vilsack and the other witnesses for coming before the Senate Agriculture Committee to discuss a topic we must not lose sight of amidst all the other important issues Congress is currently tackling.

The reauthorization of the Child Nutrition Act gives us a chance to take a look at the programs that ensure all of this nation's children are properly fed and nourished. It also allows us the opportunity to build upon the initiatives that work and fix those that do not. One of my top priorities this year has been working to ensure a robust and meaningful update to these programs, because they are extremely important to this nation's children, parents, educators, farmers and society as a whole.

First, this legislation can provide us with key weapons in our fight against the obesity epidemic. According to the Surgeon General one in four Americans are obese, costing our nation an estimated $117 billion annually in increased medical costs and lost productivity. Especially among children, we have seen the prevalence of obesity grow at an alarming rate. When I was a child, 6.5% of children aged six to eleven were obese. Today the number has more than doubled to 17%. Among adolescents 12 to 19, the number has more than tripled, from 5% to 17.6%.

More than just promoting health, strong programs can also help to make our nation more competitive in a globalizing world. Countless studies have shown a strong link between strong cognitive development and proper nutrition. As children grow, healthy eating habits have been shown to enhance academic achievement and promote good behavior. By properly investing in this legislation, we can provide our children with the foundation they need to succeed and continue to ensure a prosperous America for generations to come.

Second, this legislation provides us with one of our most comprehensive tools for combating childhood hunger. The National School Lunch Program is one of the most familiar programs in the country, touching the lives of over 30 million children a day. The Child and Adult Care Feeding Program provides nutritious meals for 3 million more pre-kindergarten children. For many children, these programs are the only guarantee of not going to bed on an empty stomach.

Third, this legislation can help to save the family farms we are losing every day as a result of the current economic downturn. I will continue to advocate for stronger farm-to-school initiatives that connect schools with locally-produced fresh fruits, vegetables and value-added products like pre-sliced apples and carrots. I am confident New York's farmers are up to the challenge of producing healthy and nutritious products for the school meal program. I want to give them the opportunity to provide their high-quality products to schools throughout the state and region.

Here at the federal level, we must ensure that our program administrators have sufficient funding to carry out their important functions. Many of our programs have been faced with a chronic shortfall of funding, as prices for basic items continue to rise.

In regards to the school lunch program, the School Nutrition Association estimates the reimbursement rate would need to be 35 cents higher just to keep schools from losing any more ground. We can do better than this, and for this reason I have advocated for a 70 cent increase to the school lunch reimbursement rate. With this money, our schools could be feeding our children more fresh fruits and vegetables, less processed meats and more whole grains. It is an expensive proposition, but one in which I believe strongly.

We also have the ability to learn from innovative methods being tested in some of our nation's schools and expand on those ideas that have been working. By building on the ability for schools to directly certify students into the school lunch program, and expanding opportunities for schools to employ paperless counting techniques are two very real ways we can ensure children who need meals are getting them. I commend my colleagues Senators Brown, Bennet and Casey for their leadership on the Hunger Free Schools Act, and urge strong support for their efforts.

We can also follow the lead of school districts like New York City, and place strong new guidelines on the food found in vending machines and a la carte lines. By getting high-sugar and high-fat items out of the schools, we can focus on providing our children with food that nourishes their bodies and their minds. I would like to thank Senator Harkin for his leadership on the Child Nutrition Promotion and School Lunch Protection Act. I would also urge my colleagues support this critical measure.

As a mother of two young children, I must once more underscore the importance of this legislation and its impact on families throughout the country. Ensuring that children are able to access healthy and nutritious meals is important to the future of this country.

Hearing on Federal Child Nutrition Legislation
Statement of Senator Tom Harkin (D-IA)
Committee on Agriculture, Nutrition, and Forestry
November 17, 2009

Thank you Chairman Lincoln for holding this important hearing today and moving ahead on legislation supporting the nutrition and health of our nation's children by extending and improving federal assistance for school lunches and breakfasts, summer meals, child care food, and food benefits for women, infants, and children. I also want to recognize and commend Senator Chambliss, the Ranking Member, for his continuing interest in and support for child nutrition initiatives. Today we are fortunate to hear from our Secretary of Agriculture, Tom Vilsack, and additional witnesses who will add significantly to the record upon which this committee will craft new child nutrition legislation.

We provide federal nutrition support to local schools based on the simple reality that sound nutrition in childhood and adolescence builds lifelong health, prevents illness and disease, and promotes learning and education. This child nutrition bill is integral to health care reform. We have to reverse what are previously unheard-of rates of overweight, obesity, diabetes, and high blood pressure plaguing children. This legislation is indispensable in the fight to prevent illness and disease, help Americans lead healthier, longer lives, and reduce health care costs later in life. The Department of Agriculture's report yesterday that more than one million children in the United States were in families that were outright hungry at times during 2008 is sobering and compelling evidence of just how critical this legislation is.

Despite all the scientific data on nutrition, despite all the efforts and guidance of parents, and despite federal spending of about $11.5 billion a year to help local schools furnish healthy meals to students, in the vast majority of our nation's schools, students have easy access to high-fat, high-sugar, and high-salt foods and beverages. How did nutrition in our schools get so far off track? As places of learning, growth, and development, our schools ought to be commercial-free safe zones. Instead, they are a cacophony of marketing messages and product pushing. Why is that allowed?

The Secretary of Agriculture is our nation's top official with responsibility for promoting sound child nutrition, and he or she should not be hamstrung in promoting healthier foods in schools that receive federal child nutrition funds. The Secretary must have the ability at the federal level to address this problem since just a handful of states have their own school nutrition standards. So I have introduced legislation that will simply provide the Secretary of Agriculture the ability to issue sound, science-based nutrition standards for all foods and beverages sold in schools. The Secretary needs this authority to protect the health and education of our nation's children, to reinforce the role of parents in guiding their kids' nutrition, and to enhance the investment taxpayers are making each day in good school nutrition.

This legislation is plain, good common sense. It goes just as far as it needs to and no further. The Secretary of Agriculture will issue scientifically-based school nutrition standards only after a full opportunity for parents, schools, and the public to see what is being proposed and to comment upon it. The standards apply only to foods and beverages sold in schools, not to birthday cupcakes or items brought to school by students. Bake sales and similar fundraising is specifically allowed. And the bill does not specifically ban or disparage any type of food or beverage. I am very grateful to have 31 cosponsors, including Chairman Lincoln, on this nutrition standards bill.

We have a great opportunity in this child nutrition legislation to build a future of health, disease prevention, and good education for our nation's children. The task is not simple, but with dedication and effort it can be done.

Statement by Senator Pat Roberts
Senate Committee on Agriculture, Nutrition and Forestry
"Reauthorization of U.S. Child Nutrition Programs: Opportunities to Fight Hunger and Improve Child Health"
November 17, 2009

Madam Chairman, I thank you for holding this hearing today on "Reauthorization of U.S. Child Nutrition Programs: Opportunities to Fight Hunger and Improve Child Health." Next year, we will need to reauthorize the Supplemental Nutrition Program for Women, Infants, and Children (WIC); the School Breakfast and National School Lunch Programs; the Food Summer Service Program; and the Child and Adult Care Food Program. These important programs are critical for the well-being of our children. In addition, they are vital in enabling our children to learn and succeed. Studies have shown time and again that students perform better in school when they eat balanced meals. I look forward to working with my colleagues next year to address the nutritional concerns of our children.

Statement by Margaret L. Bogle, Ph.D.

Executive Director, Delta Obesity Prevention Research Unit

U.S. Department of Agriculture, Agricultural Research Service

Little Rock, AR

Before the Senate Committee on Agriculture, Nutrition and Forestry

United States Senate

November 17, 2009

Chairman Lincoln, Ranking Member Chambliss and members of the Committee, my name is Margaret Bogle from Little Rock, AR. I want to thank you for this opportunity to come before you today to discuss "Reauthorization of U.S. Child Nutrition Programs: Opportunities to Fight Hunger and Improve Child Health". I hope that by relating my experiences in the Lower Mississippi Delta of Arkansas, Louisiana and Mississippi working with families, rural communities, and schools, public and not for profit agencies, will enhance your discussion of USDA Child Nutrition programs as part of the solution to improving child health, food insecurity and childhood obesity issues. These are complex issues which will require innovative efforts of our government working in collaboration with individual citizens, families, communities, farmers, food processors and manufacturers, and educational institutions at all levels.

My goal is to set the stage with an introduction to the nature of good nutrition and healthy lifestyles for families and children, so that the rest of the panel can present their views of the role of policy changes, child advocacy and recommendations for the reauthorization of the child nutrition programs. The Administration, through the efforts of the White House, USDA, and the Department of Health and Human Services (HHS), has been working to address childhood obesity. In recent months, the Secretary of Agriculture Tom Vilsack and First Lady of the United States, Michelle Obama, have taken a leadership role with the example and message of healthy eating as it relates to health and well being of our children and young people. The First Lady's White House garden, the People's Garden at USDA, and the joint USDA-White House effort to promote the Healthier U.S. Schools Challenge clearly show that our senior leadership understands the importance of healthy eating and physical activity for children and has made it a priority. Further, since 1980, USDA and HHS have jointly published the Dietary Guidelines for Americans, which serve as the basis of federal nutrition policy and programs.

Current statistics indicate continuing concern, not the least of which is that almost one-third of our children are overweight or obese. Research has shown that obese children are more likely to have risk factors for cardiovascular disease, such as high cholesterol or high blood pressure. In addition, obese children have much greater risks of becoming overweight or obese adults than those children who maintain healthy weight patterns (and overweight and obesity in adulthood increases the risk of various chronic diseases such as hypertension, diabetes, cardiovascular diseases, and cancer). Children who are obese are at greater risk for bone and joint problems, sleep apnea, and social and psychological problems such as stigmatization and poor self-esteem. Indeed, the psychological stress of social stigmatization can cause low self-esteem, which, in turn, can hinder academic and social functioning, and persist into adulthood.

At the other end of the spectrum is whether or not children are getting enough to eat. Food insecurity studies indicate that in households with children approximately 15.8 percent (approximately 6 million families) were food insecure at some time during the year. This statistic is especially critical in that we know that children in food insecure households have increased risk of health and developmental problems as compared with children in food secure households. Several characteristics of these children are alarming: higher hospitalization rates of young children, more anxiety and depression in school age children, lower math achievement in kindergarteners, lower arithmetic scores and higher likelihood of repeating a grade for children 6-11, higher numbers of chronic health conditions in children, etc. The link between childhood overweight status and food insecurity remains an unexplained paradox. Studies have found conflicting results as to whether food insecurity (or not having enough to eat at times during the year) leads to overweight and obesity in children, but there are patterns and associations that cause us to know we need more research in this area.

Research has also shown that children who do not eat breakfast have lower scores in school, more tardiness and increased rates of absenteeism than their counterparts who do eat breakfast, again showing that the school breakfast program makes a contribution not only to the health of the children, but also makes it possible for them to take advantage of the education provided at school. All children should be encouraged to eat breakfast. Children who get a healthy breakfast are less likely to be overweight.

The child nutrition programs we are discussing today have the potential to impact 31 million school children and thereby improve access to healthy, nutritious foods during the school day.

This leaves some gaps that others on this panel will discuss such as what do these school kids do on weekends and during the summer?

How do we approach solutions to these complex problems that must be solved and cannot continue to increase?

Recent reports from the Institute of Medicine, the American Academy of Pediatrics and the Robert Wood Johnson Foundation have recognized that "environmental factors affect individual behaviors related to food and physical activity. In many communities, for example, fresh produce is not available or affordable, streets and parks are not amenable to exercise, and policies and economic choices make fast food cheaper and more convenient than healthier alternatives. Communities have made efforts to improve these factors in diverse settings and with diverse populations, resulting in many promising approaches." (IOM Report October, 2009)

I have been involved in human nutrition intervention research in the Lower Mississippi Delta of Arkansas, Louisiana and Mississippi for the past twelve years. This research is a component of ongoing research endeavors of USDA, Agricultural Research Service collaborating with scientists in a tri-state region to improve the health of at-risk, rural populations in the Lower Mississippi Delta. ARS is coordinating and conducting research with the 1890 Land Grant Universities (AR: The University of Arkansas at Pine Bluff; LA: Southern University and A & M College in Baton Rouge; and MS: Alcorn State University, Lorman) and an additional university in each state (AR: Arkansas Children's Hospital Research Institute, University of Arkansas for Medical Sciences in Little Rock; LA: Pennington Biomedical Research Center, Louisiana State University, Baton Rouge; and MS: The University of Southern Mississippi at Hattiesburg.) The prevalence of many nutrition related health problems is greater for minority, rural, low socio-economic, and some ethnic groups which have led to the designation of "at-risk" populations. Rarely are these pockets of at-risk populations sampled in national surveys and may be overlooked for national food, nutrition and health assistance policies and programs.

The lower Mississippi Delta (LMD) region of AR (also LA and MS) is comprised primarily of rural communities, high minority population, with high rates of poverty, low educational attainment, obesity, hypertension, and other nutrition-related chronic diseases. The rates of nutrition related chronic diseases, especially obesity, are higher in the Delta areas than in the rest of the three states. The LMD is one of the regions of the US which clearly exemplifies the designation of "at-risk" and has great potential for ARS to study the effects of nutrition and health strategies related to improving the lifestyle and the prevention of obesity. The ability of ARS to engage in long-term research is particularly appropriate for this program component, and the idea of targeted populations of particular nutritional vulnerability complements specific components of the ARS National Human Nutrition program.

Intervention strategies to prevent obesity have been difficult to implement in these areas because of major environmental problems, limited accessibility to high quality food, poor financial resources, lack of protected areas for physical activity, and overall reluctance of communities to participate in research. The Lower Mississippi Delta consortium has worked in conjunction with multiple communities in the planning, implementation, data collection and evaluation for a 6-month nutrition and physical activity intervention for adults in Arkansas and Mississippi. Results included significant health improvements in waist circumference, blood pressure, and HDL-C with participants increasing minutes walked per day. In one of these communities I participated recently in a "Longitudinal Award Ceremony" where after three years there were approximately 30 African American women still participating in walking and 'watching what they ate". Some had significant weight losses (30 plus pounds off over time) and were still maintaining the weight loss. Perhaps even more importantly, the menu for the luncheon was comprised of healthy foods. This menu has changed in the last 3 to 4 years. My point is that these rural communities are committed to improving the health and lifestyle of their residents. This same community had refurbished a walking trail to make it safe for the participants to walk. Interventions like these serve as possible solutions to alleviate the escalating number of healthcare cases in the US Delta region that are associated with nutrition-related chronic diseases and contribute to excessively high health care costs.

We know that in the Delta as in much of the rest of the US, children and their families are not following the US Dietary Guidelines for Americans which are positioned to provide recommendations for a healthier lifestyle. As compared to the recommendations they are eating:

- fewer servings of fruits and vegetables (with the dark green and orange vegetables eaten less);
- more refined grains and fewer whole grains
- more high fat dairy and high fat meats
- more discretionary calories especially sugar

Many children in the Delta have not experienced a wide variety of fruits and vegetables and are less likely to eat new fruits and vegetables when seen for the first time. An ARS scientist has developed a method for determining the willingness of elementary children to try fresh fruits and vegetables. The good news from her research is that repeated exposure to fruits and vegetables during snacks or at mealtimes can increase the consumption of these healthy foods over time. This research team is now involved in determining if a "Tool Kit' of recipes, menus, food preparation tips and techniques, etc. will increase adherence to the Dietary Guidelines in these rural communities.

Scientists in the Delta Obesity Prevention Research Unit consortium are searching for ways to improve the lifestyle (food and physical activity) for African American college students with the goal of developing a course that all entering freshmen would take. Other consortium members are testing whether social support groups and instruction on the Dietary Guidelines help mothers and women's groups influence their families to eat better, and still another group is looking at school gardens as a tool for increasing social bonding in middle school students to determine if they will consume more fruits and vegetables that they grow and how will the physical activity of gardening assist in preventing obesity or maintaining a healthy weight.

The food choices individuals make determine the quality of their diet, but for many US Delta residents, these choices are directly impacted by poverty and food insecurity, as well as access to food stores that maintain adequate supply and variety. Scientists in this Consortium have developed and tested a regional food store survey to determine food availability and quality in supermarkets, small/medium stores, and convenience stores in the lower Mississippi Delta region. The research team discovered that supermarkets carried a large percentage of the food items surveyed and that the overall food quality was better; however, the number of supermarkets in this rural region was few and distant (more than 30 miles) to many communities. Community residents with limited transportation are likely to experience limited food supply, as small/medium and convenience stores carried more limited food selections. The impact of this research is that in order for scientists and communities to conduct nutrition intervention research to improve food quality and prevent obesity in the rural Delta, they need to improve access to healthy foods. They may have to partner with small/medium food stores, investigate community gardening, 'Rolling Stores", or food co-ops, assist in the establishment of farmer's markets, or develop and improve other environmental issues to impact resident's food choices and diet quality.

These examples are intended to show the breadth of the problem as well as suggest some solutions that are working and some that are still being tested. At least the consumers and communities are beginning to become involved in being part of the solution.

I thank the Committee for the opportunity to appear before you today to discuss the reauthorization of child nutrition programs, and I look forward to answering any questions that you may have.

Rich Huddleston

Arkansas Advocates for Children and Families

Testimony to the Senate Committee on Agriculture, Nutrition & Forestry

November 17, 2009

Thank you very much for the opportunity to testify. I am Rich Huddleston with Arkansas Advocates for Children and Families. We are a non-profit, non-partisan, child advocacy organization founded in 1977. Our mission is to ensure that all children and families have the resources and opportunities they need to live healthy and productive lives and realize their full potential. We work to promote good public policy through research, communications, and advocacy. In addition to my role at Arkansas Advocates for Children and Families, I am the co-chair of our State Legislative Task Force for Reducing Poverty and Promoting Economic Opportunity. In that role, I am working with advocates, policy makers and community leaders from across the state to devise solutions to the very serious problems of poverty in our state.

Before I begin my discussion of issues pertaining to the reauthorization of the child nutrition programs, let me begin with a personal note of home-state pride. It is a pleasure to be a part of an all-Arkansas panel before the Committee's new Chairwoman and Senator from our beloved home state. We congratulate you on your new role and look forward to working with you on the very important issues of hunger and nutrition. Your long standing dedication and leadership on these issues, as well as your knowledge of the struggles of so many of our state's citizens, will be of great service as you lead this Committee.

The child nutrition programs provide healthy meals to millions of children in a wide variety of settings, including schools, child care, after-school programs, and summer activities. I'm pleased to be able to offer our perspective on how the meal programs offered in schools can better serve low-income families. I will also touch briefly on the child care meals program. But I will leave it to other experts to cover the other important programs and issues to be considered in reauthorization.

Let me start by painting a picture of poverty in Arkansas. One in four children in Arkansas is poor. That means living on less than $21,200 for a family of four. Another quarter are in low-income families (below 200 percent of the federal poverty line). Arkansas ranks among the top four states nationally in overall poverty, with 17.3 percent of its residents living in poverty (tied with Louisiana and Kentucky at 17.3 percent) and trailing only Mississippi at 21.2 percent. No matter how hard they work, fully half of all Arkansans do not make enough money to support themselves, and the current economic crisis is not making it any easier.

Poverty has far-reaching consequences. Many poor families struggle to afford enough food. Nationally, approximately 6 million households with children — nearly 16 percent of such households — struggle against hunger. Research shows that children in these households tend to face a range of other challenges as well: they have poorer health, higher rates of chronic illness and hospitalization, more behavioral problems, and higher rates of anxiety and depression. Children's Health Watch has found that even children who are not considered food insecure but who have inadequate access to nutritious foods tend to be in poorer health and at higher risk for developmental delays. Also, it is critically important that children have enough to eat, particularly in the early years of rapid brain development. Programs like the school meals programs, which provide nutritious meals to children and make it easier for low-income families to make ends meet, play an important role in reducing poverty and food insecurity, as well as in closing the achievement gap.

These struggles make it hard for children to learn, succeed in school, and become productive workers as adults. A new national study by David Berliner (2009) shows that out-of-school factors related to poverty are the major cause of the achievement gap between poor and minority students and the rest of the student population — a conclusion supported by over 50 years of research.

Helping Poor Children Achieve and Thrive

There is much that we can do to support struggling children and Congress is leading the way on several of these fronts. Of course, with the leadership of several members from this Committee, Congress has renewed and expanded the children's health insurance program. Even as we meet today, Congress is tackling health care reform. And, Congress is working to renew the "No Child Left Behind" legislation to improve educational outcomes for children.

One of the most important next steps Congress can take is the reauthorization of the Child Nutrition Programs. The school meals programs have extraordinary reach: nationwide, more than 31 million children eat a meal provided through the school lunch program on a typical day, and more than 19 million of them get free or reduced-price meals because their family is low-income.

Unsurprisingly, as a result of the recession, the number of children who qualify for a free or reduced-price meal is growing. During the 2009-2010 school year, 276,206 Arkansas children were approved for free or reduced-price meals an increase of 6.5 percent over the prior year total of 259,453. Eating school meals has been shown to increase children's intake of key nutrients and there is some evidence that school lunch participation reduces girls' risk of becoming overweight.

Given the many benefits of the school meals programs, our goal should be to automatically enroll every single child who is eligible for free meals in a timely manner. Working toward this goal will bring three important benefits.

- Needy children in families struggling against hunger will be fed and their parents will not have to complete duplicative paperwork.

- Schools, especially those that serve high concentrations of poor children, will see a reduction in their administrative burden, which frees up resources to focus on providing healthier meals or richer academic opportunities.
- Program integrity will be strengthened by relying on the rigorously scrubbed data gathered by other means-tested programs instead of on paper applications that are prone to clerical errors.

I'm very pleased to have the opportunity to share with you some of the specific ways in which Congress can improve access to free school meals and alleviate the day-to-day hardship of struggling families. I am going to focus on two complementary approaches. One would allow schools with large concentrations of poor students to serve free meals to *all* of their students. The other would allow schools to automatically enroll for free meals any student who is receiving Medicaid, thereby helping ensure that the poorest children receive free meals regardless of where they attend school.

Creating "Hunger Free Schools" in High-Need Areas

Schools that serve predominantly poor students should not have to spend time identifying the very small numbers of children who do not qualify for free or reduced-price meals. That is like looking for a needle in a haystack. A school that serves, for example, 80 or 90 percent of its students free or reduced-price meals should have the option of moving away from individual applications and systems for tracking eligibility in the cafeteria.

Instead, the school should be allowed to serve all meals free and receive federal reimbursements based on the results of the direct certification process, an annual process that every district is required to undertake to automatically enroll children in households receiving food stamps.

In schools that directly certify more than 40 percent of their students, generally more than 80 percent of the students qualify for free or reduced price meals anyway. So if a school or district directly certified more 40 percent of its students and agreed to serve all meals free, it should not have to process applications or check eligibility in the cafeteria.

The Senate bill (S. 1343) that includes this proposal is entitled "The Hunger Free Schools Act." The title does not oversell its potential. These schools, which serve high-poverty areas, would literally be hunger-free spaces. All children would be eligible to eat breakfast and lunch free of charge. There would be other benefits as well: these schools could spend less time on paperwork and more time preparing and serving healthy meals, while parents who have already proven that they have low incomes would not be required to fill out duplicative paperwork. Congress, in short, would eliminate administrative hurdles that get in the way of effectively feeding poor children.

There are more than 12,000 schools nationwide in which more than 80 percent of the students qualify for free or reduced-price meals. Six million children attend these schools and would benefit from a more welcoming cafeteria. In Arkansas, about 250 schools fit this description; they serve about 18 percent of all students in Arkansas.

Giving schools that serve high-poverty neighborhoods a simple universal feeding option would help the neediest children and free up school resources for educational or nutrition improvements.

Automatically Enrolling Poor Medicaid Recipients for Free Meals

The proposal I just described is designed to help schools in high-poverty areas. But we also need to do more to ensure that individual poor children, regardless of where they live, are enrolled for free school meals. Children in households receiving food stamps have long been eligible for free school meals. This is a sensible policy. These families have already proven, through the rigorous food stamp enrollment process, that they have low incomes and need help obtaining a nutritious diet. For nearly 20 years, children in food stamp households have been enrolled for free school meals if they fill out a paper application or if the school district identifies them through direct certification.

As a result of bipartisan efforts in the 2004 child nutrition reauthorization legislation, sponsored by former Committee Chairman Thad Cochran of Mississippi, school districts are now required to use direct certification to automatically enroll school-age children in households receiving food stamp benefits. Last year, the first year in which the requirement applied to every single school district, 96 percent of school children attended school in a district that conducted direct certification.

Unfortunately, not all districts conduct direct certification equally effectively. USDA has estimated that 10 million children were eligible for direct certification at the start of the 2008-2009 school year, but only 6.5 million were directly certified. That means that 3.5 million children are missing out, and as many as 1.5 million of them may not be receiving free school meals. Approximately 2 million children are being enrolled with a duplicative paper application but are missing out on the important simplification of direct certification. In ten states, at least two in five children who could have benefited from direct certification missed out.

So we want to ensure that USDA works with states to do better. The grants to improve direct certification that Chairman Lincoln and Ranking Member Chambliss worked to include in the fiscal year 2010 agriculture appropriations legislation are a great start. At a time when states are making severe budget cuts and can have difficulty obtaining funds for investments in technology or training, these funds will enable states to improve their direct certification systems.

But we can do more. The second key step that Congress could take to improve access to free school meals for poor children would be to allow poor children enrolled in Medicaid to be automatically enrolled for free school meals. Parents already provide detailed income information when they enroll their children in Medicaid, just as when they sign up for food stamps. These parents should not have to complete a duplicative application, and schools should not have to process unnecessary paperwork.

Congress should permit school systems and states to work directly with Medicaid agencies to use income data from Medicaid as the basis for automatically enrolling children for free school meals. An estimated 2 million poor children participate in Medicaid but not food stamps; Arkansas is home to more than 30,000 of them. Even though these children are living in poverty and are nutritionally needy, they do not necessarily receive the free school meals Congress intended. Using Medicaid data to automatically enroll children for free school meals would free up school resources and help needy families.

Improving Nutrition for Children in Child Care Programs

While the focus of my testimony has been on improving the school meals programs, one other area that holds promise for improving outcomes for young children would be the Child and Adult Care Food Program (CACFP), which uses federal dollars to provide nutritious meals and snacks to low-income children in child care centers and family child care homes.

Child care, of course, is critical to the economic well being of low-income families, many of whom would be unable to work without it. Healthy food is paramount to meeting the good nutrition needs of low-income children in child care. Research shows that children enrolled in CACFP have higher intakes of many key nutrients and food including vegetables and milk and fewer servings of fats and sweets. By paying for nutritious meals and snacks for eligible children enrolled at participating child care centers and family child care homes, CACFP plays a critical role in improving the quality of these programs and making them more affordable for low-income parents struggling to make ends meet.

Each year more than $33 million in federal CACFP reimbursements are distributed to child care centers and child care homes in Arkansas to serve healthy meals to over 41,752 children every day. Unfortunately in Arkansas and across the country, healthy CACFP meals and snacks are out of reach for many young children in child care, especially in family child care homes. Across Arkansas, for example, family child care homes participation in CACFP has dropped 30 percent since 1997.

While a detailed discussion of steps that could be taken strengthen CACFP is beyond the scope of my testimony today, I would suggest two changes that Congress could take in this regard. One would be to increase CACFP reimbursement rates for child care centers and family child care homes to help offset the higher cost of nutritious foods. The other would be to add a third meal or snack option for children in child care, helping to meet the nutrition needs of children who are in care for long hours while their parents work. Both of these changes are part of S. 2749, "The Access to Nutritious Means for Young Children Act," introduced by Senator Gillibrand.

Conclusion

In conclusion, the school meals programs are stable, widely available programs that millions of low-income children rely upon daily. Congress has an opportunity to streamline them and improve access for the neediest children. The two proposals I have described — creating a universal paperless feeding option for schools serving high-poverty neighborhoods and allowing automatic enrollment of poor children for free school meals based on Medicaid data — would go a long way toward achieving those goals.

Similarly, Congress has an opportunity to strengthen The Child and Adult Care Food Program by increasing reimbursement rates and adding a third meal or snack option to improve nutrition for young children in child care.

Written Testimony to the Senate Agriculture Committee
Concerning Child Nutrition Re-Autho rization and Childhood Hunger

Presented by – Rhonda Sanders, Executive Director
Arkansas Hunger Relief Alliance

November 17, 2009

Senator Lincoln, Senate Committee Members, Senate staff and other honored guests. It is an honor and pleasure to speak to you today concerning childhood hunger and the Child Nutrition Act. I am the executive director of the Arkansas Hunger Relief Alliance. We are an association for the food banks, local hunger relief organizations and hunger advocates in the state of Arkansas. We have over 100 members in the Alliance and over 900 organizations as part of our network. We are a united voice in Arkansas to end hunger. During the past year and a half that I have been with the organization we have worked to raise the level of awareness concerning hunger in Arkansas, advocate for positive public policy concerning hunger and feeding programs, and to secure funding to assist the regional food banks as they serve their agencies and local organizations. We believe that the ability to provide an adequate diet to all Arkansans requires the collaborative effort of government sponsored feeding and nutrition programs, a diverse and capable charitable food system, a healthy thriving private sector, and strong public policies that support moving families from poverty to self-sufficiency.

I am honored to speak with you for the next few minutes about childhood hunger. I would like to address three specific areas concerning child hunger. They include: The State of Child Hunger in Arkansas, Childhood Hunger related to Heath and Obesity, and finally, Gaps in the Provision of Nutritional Services to Children.

The State of Childhood Hunger in Arkansas

Arkansas is a low-income rural state. We have 25% of our children living in poverty. Fourteen percent of our households in Arkansas are Food Insecure and nearly 5% are very low food insecure. Approximately half of the 464,000 public school children in Arkansas receive free or reduce price meals at school. The Feeding America food banks that are members of the Alliance serve over 300,000 people a year. Of these 300,000 approximately 40% are children,. Arkansas is consistently ranked 3rd or 4th in the nation for the highest incidence of hunger.

Hunger is a reality for many children in Arkansas. This need has increased substantially with the recent recession and which is actually just now hitting Arkansas. Our agencies report to us monthly concerning the clients they serve. They have all reported 30 to 50% increases in the past year in those seeking help. Many of these are new families that have never used the system before. An especially moving story came from a food pantry in rural Arkansas. The client was found standing outside the food pantry with tears in her eyes. She was trying to figure out which door to go in. She was offered assistance and responded to the worker that she was familiar with the pantry but didn't know what door to use because she never thought she would be needing help and she had never been there. She was there due to loss of employment during the past few months.

The Arkansas Children's Hospital participates in the Child HealthWatch project. The data collected through this project in the Emergency Room showed drastic increases in food insecurity among children this past year. Since 1999 a survey has been taken in the ER. Some of the survey questions relate to food insecurity and hunger. Since 1999 the responses to these questions have remained stable reflecting very little change. This past year the numbers jumped significantly for the first time. The percent of households reporting the lack of food jumped from 10.7% in 2007 to 22.25 in 2008. This is a substantial increase and is indicative of the economic crisis many families are facing.

Arkansas is a state that struggles with poverty, poor health outcomes and low educational attainment. Hunger is a direct contributor to many of these poor outcomes and it is a curable problem.

Childhood Hunger Related to Health and Obesity

Thanks to the research of organizations such as Feeding America, The Food Research and Action Center, The Robert Wood Johnson Foundation and the Children's HealthWatch Project it is clear that hunger affects a child's ability to learn and develop appropriately as well as increases the odds for them to be overweight and develop significant health problems.

Children's HealthWatch works to improve child health by bringing evidence and analysis from the front lines of pediatric care to policy makers and the public. Their research is grounded in the experience of pediatrician researchers who see first-hand in clinics how economic conditions and public policies are reflected in the health and well-being of their youngest patients.

Their network of pediatricians and public health researchers collects data on children up to the age of three in emergency rooms and clinics at Boston Medical Center, the University of Maryland School of Medicine in Baltimore; **the University of Arkansas for Medical Sciences in Little Rock**(Arkansas Children's Hospital); Hennepin County Medical Center in Minneapolis; and St. Christopher's Hospital in Philadelphia.

The results of this research are eye opening and arm us with data to advocate for public policies that will strengthen programs that ensure children are fed with nutrient rich items. The data clearly shows that hungry children are sick more often and are more likely to be hospitalized. They suffer growth impairments and incur developmental impairments that limit their physical and intellectual development. These outcomes result in higher medical costs and lower economic productivity of the children into adult hood as well as their parents.

Additionally, data shows that there is a correlation between childhood food insecurity and obesity. There are several possible causes for this correlation including quality and quantity of food consumed; health and feeding practices and caretaker depression. Data shows that children whose families are food insecure are more likely to be at risk of overweight. Other research show that young children who have experienced food insufficiency at any point during the child's toddler years was 3.4 times more likely to be obese at 4 and a half years of age. This data is even more alarming when you match it with the data that families with young children are the group most likely to be food insecure. The direct health affects of obesity have been clearly documented, but you must also factor in the effects of obesity on emotional and cognitive development.

Government sponsored programs like School Lunch and Breakfast, WIC, Aftershool and Summer Feeding are ways to ensure that low-income children have access to nutritious foods that can help form an adequate diet. These programs are important from two perspectives. They feed hungry children and they provide the food in most nutritious manner possible. Ensuring that these programs maintain the highest nutritional standards is imperative to providing access to healthy foods for all children. Several states have developed nutrition standards for all foods provided in their schools to ensure that the high standards for reimbursed school meals are evident in other venues at the school. States have met with varying levels of resistance and have adopted a variety of standards from state to state. National standards for all food and beverages provided in schools can be a method to help secure a goal of access to healthy foods for all children.

As a state Arkansas recognizes the need to provide nutritious options for all children in public schools as a means to help combat obesity and teach good eating habits. As a result of legislation in 2003 the State Department of Education passed regulations governing the types and portion sizes of foods that can be provided to children in the school setting. While the standards were not adopted specifically with hungry children in mind they are still addressing a basic need for nutritious foods that all children including those suffering from hunger have.

Access to the program for many families is also an issue. Many children live in households that fall between the 131% and 185% level of poverty. This qualifies them for reduced price meals instead of free meals. For many children this makes the difference in receiving a nutritious meal at school or going without. Most schools attempt to bear this cost by not ever denying a child a meal. By eliminating the reduced price category and moving the eligibility for free lunch and breakfast to 185% of poverty schools could provide meals to thousands more children in Arkansas alone.

Access can also be increased by continuing to research methods for simplifying eligibility. This can be done by improving current direct certification methods for free/reduced school meals and to use additional methods, such as direct certification with Medicaid, for determining eligibility for free/reduced school meals. These methods will provide greater access to eligible children.

Gaps in Provision of Nutritional Service to Children

While the School Lunch and Breakfast Programs are serving over 214,000 children in Arkansas and millions across the nation during school hours, there is still a gap in services for children when school is out. These out of school times include the summer, afterschool, weekends and holidays when children are often left without adequate food to get them through until school is in session again.
The National School Lunch Program reaches nearly 18 million children across the nation with free and reduced lunch. Other programs designed to address out of school needs reach at the most 2 million children. Clearly there are gaps between those who need the nutritional services and those who are utilizing them.

Feeding During the Summer

The Summer Feeding Program has seen several administrative improvements over the past years making it easier for organizations to participate in the program. Even with these improvements states have extremely low rates of participation. Arkansas had only 21,618 children participate in the summer food program in 2008 while over 214,000 participated in Free/Reduce Lunch in 2007-2008.

There are several barriers to the program that can be reduced to enhance participation:

- Currently non-profit sponsors are limit on the number of sites and participants that can be served. This is an out dated regulation and keeps many non-profit sponsors from reaching their full capacity.
- Some sponsors need start up money to help them develop their programs. There is often equipment and outreach needs that occur before the reimbursement is available. A pool of funding for these types of activities would encourage and enhance participation
- Rural areas struggle with congregate feeding sites during the summer. It is often a long distance for children to travel to receive their meals in rural America. This is a barrier to many children during the summer months as they lack transportation to and from the feeding site. Looking at new methods for delivery of meals would open up new opportunities for many children living in a rural setting.

Under the leadership of Senator Lincoln the recent extension of the Child Nutrition Act includes $85 million for pilots programs targeted at increasing the number of children participating in the summer feeding program. This will provide states with a wonderful opportunity to test some of these recommendations for further consideration.

Feeding Children Afterschool

Currently programs to feed children afterschool meals and snacks come out of the Child and Adult Care Food Program (CACFP). Because this program originates from child care and adult care centers it is heavy on regulations, oversight, administrative and monitoring procedures. These requirements make if very difficult for many organizations to operate the program. Similar types of services are delivered through the summer feeding program during the summer months which has a more streamline administrative approach and still maintains program integrity. Streamlining the summer and afterschool programs under the summer food program would help reduce the administrative barriers and provide services to more children on a consistent basis.

Additionally, there are currently 14 states that are able to receive meal reimbursement through the At-risk Afterschool component of CACFP. States that are not allowed to receive this meal reimbursement are only able to receive reimbursement at the snack rate. Many afterschool programs are providing a meal but only receiving the snack rate reimbursement. Some are not able to bear the financial burden so they only provide a snack, which may become the evening meal for a child. Making all states eligible for the afterschool meal reimbursement rate would substantially increase the number of children receiving a full meal instead of just a snack.

A final way to increase participation in both the summer feeding program and the afterschool and child care programs is to reduce the area eligibility rate for participation. The federal afterschool, summer nutrition, and child care food programs allow sites to participate (receive funds for meals and snacks) based on area income criteria without individually documenting each child's household income. If a high enough percentage of children in the area are eligible for free or reduced-price meals, then the site receives a standard reimbursement for all of the children. This "area eligibility" test has proven extremely effective because it substantially decreases the paperwork for both public agencies and nonprofits (many of them small) and streamlines administrative requirements. Currently, 50 percent of the children in an area must be eligible for free or reduced-price school meals for the site to meet the area eligibility test. The 50 percent threshold is too high and should be lowered to 40 percent. Lowering this rate to 40 percent would provide eligibility for a substantial number of school district who are now excluded from this method.

Feeding Children on the Weekend and Holidays

There is currently no targeted federal resource to help with feeding children during the weekend and holidays. The charitable food system has stepped up to the plate all across the nation to attempt to fill thi gap for children and their families. Over 100 Feeding America food banks in the nation participate in a program know as the Back Pack Program to help provide schools with shelf stable foods that can get a child through the weekend or Holiday.

This program was actually started in 1995 when a school nurse in Little Rock, Arkansas called a local food bank and asked for help providing food to hungry children in her school. She told of children coming to her office complaining of headaches, tummy aches and other health problems. She soon realized that their problems were caused by having little or no food to eat at home. The lack of nutritious food outside of school lunches also caused problems in the classroom for these students. The school counselor reported students who couldn't pay attention, were disruptive and simply didn't try -- all problems that can be caused by hunger.

Because of that first phone call, food banks in Arkansas are now serving over 30,000 children a year by sending home food in low profile back packs or small boxes. The boxes will include shelf stable items that can be consumed with little or no preparation. Items like, cheese and crackers, fruit and fruit juices, beef raviolis, single serving vegetables, granola and fruit bars, and fruit cups. Food banks participating in the program solicit food donations and monetary donations to help supply the program. Unfortunately the types of items needed for back packs are expensive and food banks are constantly balancing the monetary needs of the program with the nutritional needs of the children. Since beginning the back packs food banks have made the commitment to include foods with nutritional value even if they are more expensive.

The back programs in Arkansas range in cost from $50 per child per year to $166 per child per year. The charitable food system in Arkansas is proud to be a part of this program and will gladly continue to solicit the $1 million a year it takes to sustain the program. Thousands of children have food to eat over the weekend because of this effort.

Arkansas was recently successful in obtaining $1 million dollars annually in the state to help purchase food to be distributed through the charitable food system. Due to the high need and benefit of the back pack program our first purchase was for back pack types of items that were given to the regional food banks to disperse to their back pack programs. Utilizing the funding for this purpose has allowed several of the regional food banks to expand their programs to include more schools.

Back Pack programs represent a unique and creative way to meet the nutritional needs of low-income children. Ensuring children have food to eat not only alleviates the hunger but it may also provide the first opportunity for a child to begin to be an active participant in society and no longer be on the side lines waiting for their turn. This story was shared with the Alliance from our Food Bank in Northeast Arkansas.

> *After the Food Bank of Northeast Arkansas began a backpack program, the executive director did a site visit to one of the schools to monitor the program's progress. The school counselor shared the story of a young boy who was so excited to get his first backpack of food that he sat down in her office and started going through the pack right there. When he opened up the backpack, there were 2 fresh red apples on top. He reached in his backpack and with a big smile he pulled out the apple and handed it to the school counselor. She smiled back and replied, "Isn't all of that food great. Now put it back in the bag and take it home for the weekend." She said his smile immediately faded, so she asked him what was wrong. She wasn't prepared to hear his response: "But I've never had anything that was mine to share. I want you to have this apple."*

Who would have thought that something as small as an apple could offer a child so much hope? To him, it was much more than food to eat. It was the opportunity to be like the other children...to feel the joy of giving...to have hope.

That's what all of our child hunger programs are about—HOPE. It's really more than an opportunity to provide for a child's basic needs. It's an opportunity to have a positive impact in the life of a child. To provide them with the tools that they need to break the cycle of poverty.

Back Pack programs or other similar programs that provide food to children on weekends and holidays have become an integral part of feeding those who are the most vulnerable in our society. At this time there is no source for funding these programs outside the individual efforts of local and regional programs. We feel that there could be great benefit in funding several pilot programs that could explore various methods for providing food to children in low-income households on weekends and school Holidays. Funding pilots for this purpose would give us the chance to develop a new tool that can become part of the arsenal for eliminating hunger and reducing poverty in our country,

Conclusion
It has become increasingly clear that reducing hunger in children will help improve their health, education and economic opportunities. We have many tools in our arsenal to help achieve that. Programs like school meals, WIC, afterschool meals and summer lunches are ways to reach children in many places to provide adequate nourishment. However, many of these programs can be improved or expanded to allow for more nutritious foods and to reach more children. Some programs like the Back Pack program have not been supported through a federal program. We encourage the opportunity to develop pilot projects to identify the best ways to sustain this program in the schools.

Under the leadership of Senator Lincoln I know childhood hunger and nutrition programs will be a priority and we greatly appreciate that. We recognize that expanding and improving these programs will result in a need for an additional investment of funds. We do feel however, that it is an investment. This is an investment with vast returns and we can't forgo this opportunity. I applaud each of your efforts and look forward to serving as a resource to you in the future.

Thank you for the opportunity to speak to you today.

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Testimony of Jennifer Smith
Director of Regulatory Compliance
Wal-Mart Stores, Inc.

Before the
United States Senate Agriculture Committee

"Reauthorization of U.S. Child Nutrition Programs:
Opportunities to Fight Hunger and Improve Child Health"

Tuesday, November 17, 2009

Walmart

Introduction

Chairman Lincoln, Ranking Member Chambliss and distinguished members of the committee, on behalf of Wal-Mart Stores, Inc. (Walmart) and our 140 million weekly customers, I am honored to testify before you today. Although the Senate Agriculture Committee has jurisdiction over a number of federal child nutrition programs, I would like to specifically address the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) and some of the issues we have identified that should be addressed in the upcoming reauthorization – specifically on the transition to electronic benefits transfer (EBT) and the new WIC food package.

My name is Jennifer Smith, and I am Walmart's Director of Regulatory Compliance, based at our Home Office in Bentonville, Arkansas. As the leader of the team of associates who help Walmart become an authorized retailer for WIC and the Supplemental Nutrition Assistance Program (SNAP), one of my responsibilities is to ensure that Walmart's corporate compliance programs related to WIC and SNAP are properly executed in our U.S. stores. My team develops and delivers WIC and SNAP training and communication for all U.S. stores, and we also take action to address and correct compliance issues associated with these programs. We also help ensure that store associates are held accountable when they do not follow our corporate compliance policies and procedures.

The committee should be commended for holding this hearing addressing the important and sobering problem of childhood hunger. Like you, we support President Obama's goal of ending childhood hunger by 2015, and we recognize that your work in this committee over the next few months will play an important role in achieving that goal.

At Walmart, we take a comprehensive approach to tackling the hunger problem. We have partnered with the Feeding America network to donate food from Walmart and Sam's Club locations around the country. By the end of 2009, we expect to donate more than 90 million pounds of food – the equivalent of 70 million meals – to the Feeding America network of food banks. Walmart also supports Meals on Wheels for seniors and Boys and Girls Clubs' summer food programs for kids. Possibly the most significant advantage we have is our ability to source and sell safe and high quality food products at the most competitive prices, which helps our customers save money so they can live better.

Walmart and WIC

Walmart is the largest grocery retailer in the U.S. with stores in many communities, tribal areas and all 50 states. As such, we are the destination many Americans choose to fulfill their grocery needs, and are uniquely positioned to have a comprehensive understanding of the WIC program from a retail perspective. We are currently processing more than 4 million WIC transactions on a monthly basis, an increase of approximately 400,000 transactions per month over the same period last year. As you might imagine, we are looking for the most efficient way to process WIC transactions while providing the highest level of customer service to all customers. The issues presented in my testimony today are mainly focused on the operational and customer experience aspects of the program.

Electronic Benefits Transfer

With regard to my comments on electronic benefits transfer, let me reiterate that we have developed these positions with the goal of providing the best service to all customers. A WIC customer should have the ability to shop our, or any retail store, with dignity and without being singled out in the check-out lane. Our thoughts are focused on technological ease of use and simplicity for the WIC customer. Moreover, we believe that standardization of EBT will help bring much needed efficiency to the transactions and would help reduce administration costs for the program. Those savings in administration costs should be redirected to provide more benefits to more customers in need.

Walmart, like others in the merchant community, enthusiastically supports the transition of WIC benefits from a paper voucher system to EBT. One need only look back to the successful transition of SNAP from paper coupons to EBT to see what lies ahead for the WIC program. The transition to SNAP EBT has positively impacted the SNAP recipient's shopping experience, retailer efficiencies, and fraud-reduction. We are eager to see these same positive outcomes for the WIC program.

The existing WIC paper voucher system is the most complicated, time-consuming, and costly transaction currently conducted at our point of sale. Additionally, the paper transaction process significantly spotlights the WIC participant; creates confusion, frustration and confrontation between the customer and the cashier; and requires them to conduct separate transactions for WIC and their other groceries all potentially adding to the stigma associated with receipt of these benefits. For these reasons, we fully support a smooth transition from a paper-based WIC transaction to electronic benefit transfer for WIC or, eWIC.

Moreover, we view the transition to eWIC as a collaborative effort between the public and private sector. While it is important to allow for technological innovation and creativity, there are times when all relevant stakeholders should reach a consensus about how the technology will work and coalesce around a common set of standards to ensure a successful implementation. The U.S. Department of Agriculture (USDA), Food and Nutrition Service (FNS) should be commended for beginning work in this regard, and we would encourage the committee to consider mandating development of one set of technical standards and operating rules for eWIC in the upcoming reauthorization.

Walmart has been involved in eWIC developments with several WIC authorities, including Texas, New Mexico, Wyoming, Cherokee Nation, Michigan, Kentucky, and Nevada. Not all stakeholders involved in eWIC development view the process as a collaborative effort. The fundamental obstacle encountered during eWIC developments can most commonly be attributed to a mistaken belief that all WIC authorized retailers should conduct transactions in precisely the same way, or the assumption that what works for one retailer will work for all.

Walmart's most successful eWIC transitions to date have been the developments in Texas, New Mexico, Wyoming, Cherokee Nation and Kentucky. The factor that contributed most directly to the successes of these eWIC programs was the willingness of all parties to work together to achieve a common set of technical standards and business operating rules that could be adopted by all WIC authorized retailers. I also observed these WIC authorities supporting one another during each of their respective eWIC project development cycles, lending their expertise to the latest authority attempting to implement eWIC.

The anecdote above illustrates standardization is the key to eWIC's success. Standardized technology and business operating rules are critical to the long term viability of any electronic tender. For retailers, tribal authorities, the federal and state governments; it is inefficient, costly and unsustainable to have different eWIC programs in each location. We support the development of an implementation guide, for all WIC agencies, containing standard business rules and increased clarification of the ANSI X9.93 messaging standard to ensure that ambiguous and optional items are eliminated. To ensure a better customer experience and reduce costs, all WIC agencies and processors should be required to adhere to this guide once it has been developed.

However, it is important to understand that not all EBT delivery systems are the same, as there are currently two prevailing technologies being used. Some states, including New Mexico, Texas and Wyoming, have chosen to use a smart-card, or offline, approach to delivering benefits. Smart cards are advanced payment devices, capable of storing significant amounts of data, which can then be accessed and altered by smart card readers. Unlike the debit and SNAP EBT transactions we are all familiar with, there is no online message sent from the cash register to an authorization host. Instead, the communication necessary to conduct the transaction occurs exclusively between the memory chip on the card and the retailer's cash register system. During a transaction, the card is inserted into a smart card port on the debit reader. Once inserted, the card communicates to the cash register the amount and category of WIC benefits that the participant has available. The items purchased are then deducted from the balance on the card. It is important to note that the cash register cannot add benefits to the card, preventing a likely source of cashier-complicit fraud. For settlement, the retailer's cash register system collects all the pertinent transaction information for the day and sends a single file to the WIC authority. The WIC authority then funds the retailer's account in accordance with that settlement file.

The other approach to delivering WIC benefits electronically is the online magstripe, system. This system uses the online EBT infrastructure that is often used for SNAP EBT transactions. The card is swiped at the register, and the customer is prompted for a personal identification number (PIN). Once the customer keys in her PIN, the register sends a balance inquiry message to the WIC authority's authorization system, typically through one or two intermediary transaction processors. The WIC authority's system then responds with the type and quantity of benefits that are available to the cardholder. Once all the WIC items have been scanned, the register sends a second message containing the food category, price, UPC, and quantity of items to be deducted from the benefits. The WIC authority then responds with a message containing either an approval or decline message and the approved or declined status of each item that was submitted for authorization.

It's important to keep in mind that, while online eWIC transactions use the same infrastructure as is used for SNAP EBT, online eWIC transactions are quite different from, and significantly more complicated than, SNAP EBT transactions. In conducting a SNAP EBT transaction, the merchant sends a single message consisting of the dollar amount for which approval is sought. The state host then replies with either an approval or decline. Comparatively speaking, an online WIC message is approximately 15 times larger than a SNAP EBT message.

After many tests with both technologies, we can say, with a reasonable degree of confidence, that the smart card technology has been the easiest, best performing eWIC system to date. We remain optimistic that both the smart-card and the online magstripe technologies can help deliver WIC benefits to our valued customer. However, as more WIC authorities begin to implement eWIC systems, there is an urgent need for USDA to require adherence to, at the very minimum, one standard for offline, smart card technology and another standard for online, magstripe technology. However, because the two technologies are not interoperable with each other, even that would not allow complete interoperability among all WIC agencies, another important goal for eWIC.

Interoperability of eWIC

When Congress issued the initial EBT mandate for SNAP, it was not conditioned on interoperability. This created problems in places like Washington, D.C., New York, NY, and southern Ohio, where SNAP recipients commonly shop outside their home states. We should apply the lessons learned during the SNAP EBT transition to the upcoming eWIC transition.

We believe interoperability, the technical ability to use and accept eWIC cards at any WIC authorized retail location, regardless of what WIC authority issued the card, goes hand-in-hand with standardization. From the retail perspective, standardization and interoperability are the keys to ensuring a cost-effective approach and a positive customer experience. Without standardization and interoperability, we believe there would be an unnecessary increase in state and merchant costs, and, unnecessary restrictions placed on the shopping options of WIC participants.

More importantly, interoperability is essential in times of natural disaster. When Hurricanes Katrina and Rita displaced residents of Mississippi, Louisiana and Texas, WIC and food stamp customers fled to other states. Because the primary method of distributing WIC benefits has been paper checks, there were no significant technical hurdles to out-of-state acceptance in, for example, Arkansas WIC-approved stores. Despite the lack of technical complications, out-of-state acceptance following these disasters was approved far too late. At the time, WIC participants were forced to go to a local WIC office to receive paper vouchers. This was obviously not an ideal solution, but it was one that made it possible for these participants to receive their benefits during the direst of times. Lacking interoperability, eWIC would potentially become a barrier to the use of benefits during such disasters. The last thing that should be considered is the development of an eWIC system that could ultimately make WIC participants worse off than they would have been with paper. To avoid that, we must insist on strict adherence to an interoperability requirement.

Customer Experience

Walmart strongly believes that WIC participants should enjoy at least the same level of service provided by EBT systems in the SNAP program. Further, as SNAP EBT improves, so too should eWIC. In this regard, we believe eWIC performance standards, for online magstripe eWIC, should be linked to the national SNAP EBT performance average. Because of the nature of the transactions, downtime is not a consideration for offline, smart card eWIC implementations. For magstripe implementations, though, it would create a grave disservice to our WIC customers to allow eWIC processing systems more downtime than other types of electronic tender.

eWIC Mandate

Because of the tremendous benefits enjoyed by all parties to WIC transactions – WIC authorities, participants, and authorized retailers – Walmart strongly believes that eWIC is the future of WIC. For that reason, we believe that Congress should mandate that all WIC authorities transition to eWIC for benefit distribution. Such a mandate, however, must include the consideration of the above points, and should only be made in tandem with the true standardization of operating rules and technical specifications to maximize the level of interoperability possible in the eWIC system.

New WIC Food Package

Another resource intensive issue that I would like to focus on is the new WIC food packages that were implemented nationwide on to October 1, 2009 based on recommendations made by the Institute of Medicine (IOM). Walmart applauds and supports the addition of fresh fruits and vegetables to the WIC food packages as a way of providing even more healthy and nutritious foods to WIC participants. On a number of levels right now Walmart is aggressively implementing health and wellness programs to better serve our associates and customers.

Although we support the modernization of the WIC food packages, it is important to note that the former food packages had only about 500 approved food items. The new packages have approximately 12,000 items to date. This is a significant expansion of eligible foods under WIC, and given the added complexity, it would be helpful if there were a centralized database that listed all the eligible products under the program. This would help retailers, especially those operating in multiple states, meet their obligations as WIC vendors. We would support a provision in the upcoming reauthorization that authorizes and funds the development of such a program within USDA.

Perhaps the most significant change in the package was the addition of a new cash value voucher benefit for the purchase of fresh fruits and vegetables. During the public comment period on the proposed food package changes, Walmart submitted a letter to USDA supporting this proposal while urging that the voucher program be designed in a way that is easy for our WIC customers to use and understand.

Additionally, we have heard from our vendors and others in the retail community that there is a significant need for a universal set of guidelines or criteria that WIC authorities could use to approve products for the WIC program. It would be helpful if the retail and manufacturing community could access this guidance in a centralized location.

As states prepared to implement the new food package, requests for information (RFI) were sent to the manufacturing and retail community. Each company was responsible for responding individually with information on availability, sales data, average retail price and nutritional information. Some states coordinated as a geographic group and allowed data to be submitted all together, but then individual states within that group would send out an additional application for completion later.

Complicating things further, information requested was variable from state to state, which added more confusion and uncertainty when responding to the RFI. Often, we experienced that requirements for foods varied between WIC authorities. We certainly understand the underlying statute allows for this autonomy, but we think there could have been greater coordination among all parties in the program to remove confusion from the system. Going forward, we think all parties involved should work more closely together to harmonize the approach taken when approving foods for inclusion in the WIC food packages.

To illustrate some of the challenges, let me focus on a few examples. Some states only allowed certain items in the program. In some cases a 46 oz. container of juice was allowed, while in others, only a 32 oz. container was approved. Metal cans of juice were allowed in some jurisdictions, but not in others. Some states allowed concentrated juice, but others did not. This made it difficult for retailers and manufacturers to identify what products would be best suited for the WIC program. Without convergence between states around criteria for approving foods, we believe potential efficiencies and cost savings go unrealized.

Also, many states decided to limit the options for fruits and vegetables rather than provide for the full package as recommended by the IOM. Many states eliminated the allowance for canned fruits and vegetables in a preference for only frozen or fresh options. Some states only allowed no salt added vegetables, while others allowed all types of vegetables.

Additionally, certain food packages only included allotments for whole grain products in 16 oz. package sizes. We understand that certain restrictions in the food package were based on IOM recommendations; however we think there should be some consideration made between nutrition recommendations and availability of product for the customer. Bread and bakery products are perhaps the best illustration of the differences between the IOM recommendations and the availability of certain supplies in the marketplace. Most whole grain loaves of bread are baked in quantities larger than 16 oz. However, the most affordable whole grain bread options usually come in 20-22 oz package sizes. In many cases these loaves are store brand options that have a significant price advantage over the 16 oz packages. Unfortunately, since the larger package options are not eligible under the new food packages, our WIC customers are forced to purchase smaller, more expensive loaves to meet the requirements of the program. If allowed to purchase the larger, more readily available, package sizes, customers would be able to save money in the program. Those savings could undoubtedly be used to cover more customers in need of WIC benefits.

Minimum Stock Requirements

Although not specifically associated with implementation of the new WIC food package, minimum stock requirements often present challenges for WIC authorized retailers. I'd like to share a specific challenge encountered during the launch of the new food package. One of the new food options for WIC moms is jar baby food made from fruits, vegetables and meats. Most states allow WIC moms to select from multiple approved brands of baby food, as long as the jarred foods meet the nutrition requirements defined by IOM and USDA. Some states approved a single brand of jar baby food for WIC moms to purchase. The number of jars WIC moms are allowed to purchase in one transaction can be quite large, up to 32 jars at a time in some cases. When only one brand of jar baby food is approved, this can result in a situation where two or three WIC moms can completely deplete the WIC approved baby foods on the shelf. We strongly recommend that WIC authorities approve more than one brand of each food item to help ensure those products are always available for mom when she comes to do her shopping.

Conversely, the minimum stock requirements for some foods are too high. This is most often the case in the infant formula category. WIC authorities will sometimes require authorized retailers to carry large quantities of certain types of infant formula, unnecessarily, particularly liquid concentrates. When the minimum stock quantity is higher than demand from WIC moms, this results in loss to authorized retailers. The formula expires on the shelf and has to be destroyed, requiring the retailer to absorb the cost of the expired product. It also results in an artificially high inventory level for a typically low demand item. This increases warehousing costs and reduces storage capacity for more high demand products.

Walmart recognizes the need to ensure WIC moms don't make a trip to a store simply to find that the products she needs are not available, but demand is not the same for all products. If there were greater cooperation between WIC authorities, retailers and manufacturers about how many moms are receiving benefits for infant formula and baby food, authorized retailers would be better positioned to meet that demand and best serve our WIC customer.

Cost Containment

In 2004, the Child Nutrition Services Act was amended to include cost containment provisions intended to curb program expense created by WIC only stores operating in several states. Since that time, Walmart has experienced an unprecedented rise in the number of WIC checks returned to our stores for exceeding the maximum reimbursement rates established by WIC authorities. In some states, these cost containment losses to Walmart total over $100,000 per month.

Because states were given latitude in how to define retail peer groups and the formulas they use for setting the maximum reimbursement amounts, there is no consistent approach to how cost containment is applied. Compounding the problem, authorized retailers have no prior knowledge that the retail prices they are charging exceed the maximum reimbursement rates. In most cases, we simply receive an invoice from the WIC authority the following month asking for reimbursement of these "overcharges." WIC customers are not being charged a price higher or even different than any other customer (a WIC program violation), and yet the result is that the WIC program asserts that it has been overcharged.

I also question whether this has resulted in a greater than expected administrative cost for WIC authorities. Checks that exceed the maximum reimbursement amount are typically returned to authorized retailers for potential adjustment and resubmission, resulting in WIC authorities and their contracted banks handling these checks more than once.

If WIC authorities were required to publish their maximum reimbursement amounts for WIC approved foods, authorized retailers and the WIC authorities could avoid these administrative costs. WIC checks would be submitted at prices that were within the approved reimbursement amounts resulting in authorized retailers and WIC authorities only having to handle the checks once. There are currently a handful of states that do publish their maximum reimbursement amounts. We find this to be a great help to our stores in ensuring they receive at least partial payment for the foods sold to WIC moms.

Closing

Members of the committee, thank you for the opportunity to testify before you today on the WIC program. As a retailer, and the destination of many WIC customers in the U.S., we are glad to have had the opportunity to share our recent experiences in the program. We have an unprecedented opportunity to bring uniformity and standard operating rules to the program which will bring costs down, improve program efficiencies and help simplify the shopping trip for moms. Moreover, if these proposals help the program save money, we'll all be able to serve more women and children in need.

On behalf of Walmart, and others in the retail community, we look forward to working with the committee on the upcoming child nutrition reauthorization legislation.

STATEMENT OF THOMAS VILSACK
SECRETARY OF AGRICULTURE
BEFORE THE SENATE COMMITTEE ON AGRICULTURE, NUTRITION AND FORESTRY

NOVEMBER 17, 2009

Madam Chairman and members of the Committee, thank you for the opportunity to discuss the pending reauthorization of the Department of Agriculture's (USDA) Child Nutrition Programs and WIC program. The first item that the President discussed with me when I was first selected for this job was for USDA to provide our children with healthier, more nutritious meals. I pledged then and continue to uphold that pledge -- the USDA will do everything it can to support the health of our children and the health of the school environment in thousands of schools across the country.

BACKGROUND

The reauthorization of the Child Nutrition Programs presents us with an important opportunity to combat child hunger and improve the health and nutrition of children across the nation. The Obama Administration has proposed a historic investment of $10 billion in additional funding over ten years to improve our Child Nutrition Programs. It is designed to significantly reduce the barriers that keep children from participating in school nutrition programs, improve the quality of school meals and the health of the school environment, and enhance program performance. This is a once in every five year opportunity to modernize the core child nutrition programs: the National School Lunch Program, School Breakfast Program, the Summer Food Service Program, the Child and Adult Care Food Program, the Special Milk Program, and the WIC Program.

The National School Lunch Program (NSLP) reaches 31.4 million children in more than 100,000 schools each day, with over 60 percent of the lunches served at free or reduced price. USDA purchases roughly 15-20 percent of foods used in the NSLP for schools based on their selections. The remaining 80-85 percent of program foods are acquired directly by schools through commercial channels, in part using funding provided by USDA to reimburse food and labor costs. Students are certified for free or reduced-price meals based on their family's income, helping to make the program accessible to those at greatest need.

The NSLP was enacted in 1946 as a necessary response to the widespread malnutrition-related health problems revealed among young draftees during World War II; leaders in Congress also recognized that nutritious lunches would contribute to success in schools. Our understanding of the links between nutrition, health, and education have grown over time, and the program has responded with changes that make the program more accessible to low-income children, and improve the content of meals to reflect the day's nutrition science. Through these changes, the core nutrition and education mission behind school meals remains just as important, if not more important, today.

Similarly, the School Breakfast Program (SBP) is available in over 88,000 schools and about 11 million children participate on an average day. As with the NSLP, students are certified for free or reduced-price meals based on their family's income. Over 80 percent of SBP meals are served to low-income children for free or at a reduced price. And we note promising strategies in SBP such as meals in the classroom, intended to overcome logistical challenges and improve participation.

States that agree to participate in these programs have the responsibility to serve meals that meet science-based nutrition standards. USDA's role, in addition to providing funding and setting those standards, is to provide the training and technical assistance that can enable States and schools to deliver meals that are nutritious and appeal to children.

Today, we also recognize that the need for nutrition does not end during the summer months when school is out. The Summer Food Service Program (SFSP) provides meals to children during those months in conjunction with their participation in summer programs at schools, playgrounds and other community sites. Unfortunately – and despite long-time efforts – the program as it currently operates does not have the breadth and depth necessary to provide the nutrition support that the school meals programs do during the school year. One major challenge is to improve access to food in the summer well beyond the 2.2 million children currently served in SFSP.

The Child and Adult Care Food Program (CACFP) supports the provision of healthful meals through preschool child care and also includes after school care programs, along with other community settings. Currently serving about 3.2 million children on an average day in child care homes and centers, CACFP supports the health and education of the children that participate in these programs, and enhances the ability of child care providers to ensure quality care. We know that healthy eating habits are established early in the lives of young children, and quality food and nutrition in child care and after school can be a sound, effective foundation piece.

Finally, the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) continues to serve as both a supplemental nutrition program and as a gateway to the health care system. WIC provides supplemental foods to pregnant, postpartum and breastfeeding women, infants and children. WIC reaches nearly 9.1 million people each month. About half of the infants in the United States participate and benefit from the WIC program. The new food packages that participants began to receive last month in all States, territories, and tribal communities now include fruits, vegetables and whole grains, and less fat, along with other changes to reflect the latest nutrition recommendations.

Meal adequacy, food safety and nutrition education are each central to the missions of these programs, and USDA works actively to ensure that each program works to make safe and nutritious meals a reality for every child it serves.

USDA contracted with the National Academies' Institute of Medicine (IOM) to provide evidence and science-based recommendations for the foods offered in these programs so that they address the need for us to include more fruits and vegetables, whole grains and low-fat dairy, fewer "empty" calories. The IOM recommendations were used to update the WIC food package.

Just last month, IOM released recommendations to USDA to improve school meals, which pave the way for the first major revision of the nutrition standards for school meals since 1995. And this month, the IOM convened the panel that will be recommending improvements to the CACFP by this time next year.

In the meantime, we are continuing to advance our nutrition and food safety responsibilities. The Department recently expanded the HealthierUS School Challenge, which recognizes schools that voluntarily achieve new levels of commitment to improving the nutrition environment, to middle and high schools. Over 600 schools have now been recognized. We also provide schools with a range of educational and technical assistance materials that promote fruits and vegetables and other key aspects of the Dietary Guidelines. The Department recently released a Menu Planner for Healthy School Meals, which will help schools improve their menu plans: serving more whole grains, fruits, and vegetables, and lower amounts of sugar, sodium, and saturated and *trans* fats in school menus. And we are preparing to release an online toolkit for assisting schools in meeting the HealthierUS School Challenge. This toolkit will include resources to assist schools in assessing and improving their food offerings, including an online calculator to determine the nutritional content of meals sold outside of the meal programs. We also provide support and assistance for school wellness policies, through which communities can work together to support a healthful food and physical activity environment for their children at school.

With regard to food safety, USDA recognizes our special responsibility to protect the health of the children we serve, and is committed to a comprehensive, coordinated approach to food safety for the school meals programs. Our hold and recall procedures, including the Rapid Alert system, helps to assure that we are able to act quickly to prevent issues with regard to USDA foods from impacting our clients. USDA also communicates with the Food and Drug Administration on recalls of FDA-regulated foods and other food safety concerns that may impact school meals. We continue to work with schools to ensure that they have robust food safety programs based on hazard analysis-critical control point (HACCP) principles, and provide resources such as the Food-Safe Schools Action Guide and other technical assistance to promote food safety excellence in every school.

CHALLENGES

As more of us become aware of the importance of eating well and exercising, we find ourselves at a unique moment where leaders at all levels of society – State and local officials, school nutrition professionals, the food industry, public health professionals, and many others – are asking what they can do to improve the health and nutrition of our children.

Obesity and the health conditions that it causes are related to poor diets and under-consumption of fruits and vegetables.

Children and youth are also not as physically active as experts recommend to prevent obesity and promote good health. The most recent Youth Risk Behavior Surveillance System found that only about one-third [34.7%] of high school students met recommended levels of physical activity. Only about half [53.6%] had physical education classes even once a week, while about one-quarter [24.9%] of students played video or computer games for 3 or more hours on an average school day, and about one-third [35.4%] of students watched television 3 or more hours on an average school day. This, too, contributes greatly to the "energy balance" problem that leads to obesity.

At the same time, we face a continuing problem for some families being unable to provide their children enough to eat. The Department released a report, "Household Food Security in the United States, 2008" showing that in over 500,000 families with children in 2008, one or more children simply do not get enough to eat--they had to cut the size of their meals, skip meals, or even go whole days without food at some time during the year. This is simply unacceptable in a nation as wealthy and developed as the United States.

Furthermore, any teacher can tell you that the relationship between healthy eating, nutrition, and learning is as dramatic as the linkage between nutrition and health. Breakfast is particularly important in this regard; research shows that eating a good breakfast is linked to better school performance and classroom behavior, and fewer visits to the school nurse. Investing in meal quality and access to these critical programs will help support the capacity of our young people to learn and acquire the tools necessary to become the leaders of tomorrow.

OPPORTUNITIES/BROAD IMPACT

As more of us become aware of the importance of eating well and exercising, we find ourselves at a unique moment where leaders at all levels of society – States and cities, school nutrition professionals, the food industry, public health professionals, and many more – have begun to take steps to do their part to improve the health and nutrition of our children.

The legislation we are discussing today has the potential to shape important and much-needed changes in our nutrition environment as a Nation – with the prospect of better health and well-being in the years to come.

We can improve access to meals and explore new means of empowering communities to reduce food insecurity and hunger, especially among our children. We can make every school a place where nutrition and learning shape the food offered by improving the quality of meals, eliminating foods that do not support healthful choices, and expanding physical activity opportunities.

We can help pregnant women, new mothers, and the youngest children receive the support they need for an optimally healthy start, and support working families using child care, by providing nutritious food for their children, to help them deal with the challenges of today's economy.

This is the power of these programs – and the opportunity we share to harness that power for a better future.

Beyond these food security, nutrition, health and learning objectives, the reauthorization is an important opportunity to promote economic development and a robust farm and food economy. The Child Nutrition and WIC Programs are significant outlets for the bounty of American farmers and ranchers. Each year, USDA purchases approximately $1.5 billion of healthy foods through its commodity distribution programs. As we continue to move toward the standards recommended by the Institute of Medicine, USDA and schools will increasingly purchase more fruits and vegetables, whole grain items, and low fat dairy products. These purchases will increase our support for the entire agriculture value chain – from growers to packers, shippers, manufacturers, to retailers – creating a stimulative economic impact.

This legislation is critical – not only for nutrition, but for health promotion, educational opportunity, and economic development. For these reasons, I'm appreciative of the opportunity to appear before this Committee to discuss some of the Obama Administration's top priorities for this legislation and to express my commitment to work with you to pursue a robust reauthorization that advances these key priorities.

PRIORITIES

The Administration has two main priorities for Child Nutrition and WIC programs that I will discuss this morning: (1) reducing barriers and improving access; and (2) enhancing nutritional quality and the health of the school environment. Improving program performance is also important to us, and we will be attentive to that goal throughout the reauthorization process.

We must take steps to reduce barriers, improve participation, and work to eliminate childhood hunger in this country. For many children in our programs, School Lunch and Breakfast represents the only healthy food that they eat all day. We must work to ensure access to nutrition assistance for children, when and where they need it, particularly during the "gap periods," when we know children struggle to receive the nutrition they need - summer months, during breakfast, and in after-school environments.

Participation in USDA meals programs during the summer, on average, is less than 20% of the participation level on a typical school day, and food insecurity among children tends to increase during the summer. We must find new methods to encourage summer service providers to participate in the SFSP, and to operate for longer during the summer. We also must find alternative means to get nutritious food to children when school is not in session, building on the $85 million provided for this purpose by Congress in the FY 2010 agriculture appropriations bill.

We also need to expand the School Breakfast Program. Healthy days begin with healthy breakfasts. Many teachers report that they can tell which of their children had healthy breakfasts and which did not. 100,000 schools offer lunch, and88,000 offer breakfast. But, , average daily participation in breakfast is far lower than in lunch – only about 11 million on an average school day, compared to 31 million for lunch. We must support efforts to increase the number of schools offering breakfast and the participation of eligible children in the program, and look for ways to support improvements in the nutritional quality of school breakfasts as well.

For school meals more generally, we must find and test innovative approaches and determine their effectiveness in addressing hunger among children, including modifications to counting and claiming processes in very low-income areas. Support should be provided to communities and States committed to ending the scourge of hunger. Lastly, support should be provided to direct certification efforts that automatically enroll eligible children in these programs. The Department will use the $22 million in Direct Certification Grants recently approved in the agriculture appropriations bill to encourage States to enhance their existing direct certification systems with new technologies or with ideas borrowed from States with demonstrated direct certification success.

We must do everything we can to improve the nutritional quality of school meals and the health of the school environment. On school days, participating children consume as many as half of their calories at school.

While improved school meals are critical to our nutrition and obesity prevention goals, the challenges of helping kids stay healthy extend beyond reimbursable school meals. Children are subject to innumerable influences in their environment. As they develop preferences and practices that will last a lifetime, their choices are shaped by their surroundings—at home, in school, and in their wider community. The school nutrition environment is a powerful influence in this regard. Accordingly, the Administration recommends setting higher standards for all foods sold in school, and related policies and programs to ensure that the school environment is a positive influence on children's diets, their physical activity choices, and their health. Our approach reflects the critical role that the school can play in the effort to promote healthful lifestyles and combat obesity. We believe that these efforts, combined with additional nutrition initiatives in the Child and Adult Care Food Program and the WIC program, will substantially contribute to improved nutrition and health outcomes for America's children.

Specific priorities in this area include:
- Establishing improved nutrition standards for school meals based on the Dietary Guidelines for Americans and taking additional steps to ensure compliance with these standards.
- Providing parents and students better information about school nutrition and meal quality.
- Creating national baseline standards for all foods sold in elementary, middle, and high schools to ensure they contribute effectively to a healthy diet.
- Promoting increased consumption of whole grains, fruits and vegetables, low- and fat-free milk through innovative food service delivery systems based on behavioral economics.
- Strengthening school wellness policy implementation and promoting physical activity in schools.
- Ensuring that child nutrition professionals have the skills to serve top-quality meals that are both healthful and appealing to their student customers.
- Expanding the current requirements of the food safety program to all facilities where food is stored, prepared and served.
- Expanding support for breastfeeding – the medically-preferred feeding practice for most infants – in the WIC Program, especially through expansion of the peer counseling program.

It is critical for USDA to establish improved nutrition standards for school meals, as well as national standards for all food sold in schools, including in the á la carte lines and in vending machines, to ensure that they too contribute to a healthy diet.

More information must be provided to parents on the performance of schools so that they can make choices for their children, and take action to help schools improve. We recommend that schools be required to share information about the content of their meals with the families that rely upon them.

We also need to do everything we can to facilitate relationships between farms and schools, so that as much locally grown and healthy produce can be included in school meals. As part of the 'Know Your Farmer, Know Your Food' initiative, USDA has formed a Farm to School Tactical Team, which is charged with developing and fostering practical approaches to facilitate connections between schools and local producers. Recent appropriations actions will build on this effort with grants to encourage school and community gardens.

School wellness policies should be enhanced and additional support should be providing for training for school food service professionals, so that they have the skills to serve top-quality meals that are both healthful and appealing to their student customers. Our school food service professionals are on the front lines of our children's' health and nutrition and we need to provide them with the support to excel in their jobs.
Lastly, we must continue to advance the public trust by investing in school meal performance. Through technology and training, we can reduce error rates and resolve management challenges in ways that serve our school children and the general public.

Several weeks ago, through passage of the Agriculture Appropriations bill, Congress made an important first step toward accomplishing these goals. Thanks to the leadership of Chairman Lincoln and Senators Chambliss and Harkin, and Chairman George Miller, as well as Chairman Kohl and Chairwoman DeLauro on the appropriations side, we will be able to improve children's access to meals during the summer, help enroll more children in the School Lunch Program and improve health and nutrition in child care settings. We view this as an important down payment on the priorities mentioned above.

The legislation, which was signed into law by the President several weeks ago, includes this series of high-priority goals:

- A series of Summer Demonstration Projects to develop and test methods of providing access to food for children in urban and rural areas during summer months when schools are not in session. This provision supports the Administration's efforts to take steps to end childhood hunger by 2015, a goal we can all support. ($85 million)
- Direct Certification Grants to improve the rate of direct certification in States with the lowest rates of children directly certified for free school meals. ($25 million)
- WIC Breastfeeding Performance Bonus payments to State agencies that excel in promoting breastfeeding – the medically-preferred feeding practice for most infants – through the WIC program. ($5 million)

- National School Lunch Program Equipment funding, similar to that provided under the Recovery Act, to allow states to make additional equipment assistance grants, giving priority to schools serving a high percentage of free and reduced price meals. ($25 million)
- Child and Adult Care Food Program (CACFP) Grants to State agencies administering the CACFP for the purpose of improving the health and nutrition of children in child care settings. ($8 million)

Our priorities and many more will be debated by Congress in the near future as it considers legislation to modernize these programs. Just as teachers inspire and parents encourage our children we must ensure that healthy food is available to help these future generations grow and learn.

The President and I are committed to combating hunger and providing healthier foods to our nation's children, and I hope we'll have your support in these efforts.
Again, I would like to thank the Committee for the opportunity to appear before you this morning to discuss the reauthorization of the USDA's Child Nutrition Programs and I look forward to answering any questions that you may have.

DOCUMENTS SUBMITTED FOR THE RECORD

NOVEMBER 17, 2009

AMERICAN
FROZEN FOOD
INSTITUTE

Testimony of Kraig R. Naasz

President & CEO

American Frozen Food Institute

Before the Senate Committee on Agriculture, Nutrition and Forestry

November 17, 2009

Chairman Lincoln, Ranking Member Chambliss and Members of the Committee, I am pleased to submit this testimony on behalf of the American Frozen Food Institute (AFFI). We appreciate your commitment to child nutrition and commend the Committee for holding this important hearing.

The American Frozen Food Institute (AFFI) serves the frozen food industry by advocating its interests in Washington, D.C., and communicating the value of frozen food products to the public. The Institute is comprised of 500 members including manufacturers, growers, shippers and warehousers, and represents every segment of the $70 billion frozen food industry. As a member-driven association, AFFI exists to advance the frozen food industry's agenda in the 21st century.

U.S. Department of Agriculture's (USDA) child nutrition programs must purchase food mindful of the shrinking purchasing power of the dollar without compromising nutritional value or safety. The properties of frozen foods can help USDA meet this challenge.

AFFI commends the meal-based approach recommended in the October 2009 Institute of Medicine (IOM) report to USDA, entitled, "School Meals: Building Blocks for Healthy Children." Rather than limiting specific food options of school menu planners, IOM recommends evaluating the nutritional composition of each meal choice. IOM also recommend new minimums for fruits and vegetables in the construction of reimbursable school meals. AFFI supports this approach, which encourages consumption of healthy foods that are typically under-utilized by school children, and recommends that school meal providers make use of these foods in all forms, whether frozen, canned, dried or raw.

Benefits of Frozen Food

Frozen foods offer a number of unique advantages, including nutrition, safety, convenience and economic value, which make them a natural fit for use in federal school meal programs. School nutritionists should harness the nutritional value found in frozen foods when building well-balanced menus for school children.

In September 2003, at AFFI's request, Joy Bauer, MS, RD, CDN, prepared an array of week-long menus exclusively using frozen foods. The menus Ms. Bauer prepared conform to the Dietary Guidelines for Americans. Acknowledging that an all frozen menu is an extreme example, Ms. Bauer observed, "If a registered dietician can put together a wise menu comprised entirely of frozen food products, a school food service director can utilize frozen foods to his or her advantage and to the students' advantage – as part of a comprehensive menu inclusive of other food items." Frozen food products of all types should be considered an option for schools when preparing nutritious meals for students.

The freezing process naturally extends the shelf life of foods, while locking in their nutritional value. Food with extended shelf life should always make economic sense to school nutritionists since reduced spoilage means less food is wasted and dollars are saved. Frozen foods can be stored without nutritional diminishment enabling school foodservice providers to stretch their limited budgets. In addition to reducing waste, the extended shelf life provides food service purchasers the option to take advantage of volume discounts.

Frozen foods provide popular healthy choices for students. Most frozen foods, including fruits and vegetables, are available year round thereby enhancing school food service providers' options and making menu planning and preparation easier.

Moreover, frozen foods are safe. In a scientific article for the International Journal of Food Microbiology, Douglas Archer, PhD., reviewed the positive food safety record of frozen foods. In the paper entitled, "Freezing: an underutilized food safety technology?" Archer wrote, "It also seems clear that there are researchable areas that might lead to an increased use of freezing as a barrier to food borne pathogens. It seems that freezing may be an underutilized food safety technology that can be enhanced to become a major hurdle for pathogen survival."

Frozen Foods, Part of a Nutritious Diet

Maintaining a well-balanced diet depends on the availability of and access to a variety of food options. The frozen food industry continues to produce and develop an array of products that together provide many of the ingredients necessary for a balanced and nutritious diet.

The industry appreciates the recognition and inclusion of frozen foods in child nutrition programs as expressed in the Farm, Nutrition, and Bio-energy Act of 2008. We applaud the accompanying Manager's Statement on Section 32 Purchases, which states, "Items purchased may be in frozen, canned, dried, or fresh form" in regard to the purchase of foods for schools and service institutions.

Frozen fruits and vegetables have been found to be nutritionally equivalent and in some cases, superior to their raw counterparts. This was acknowledged by an FDA ruling published in the *Federal Register* on March 25, 1998, stating that after reviewing the science, it was determined that frozen and raw produce should be treated similarly in terms of the "healthy" label. Further, the study found "...single ingredient frozen fruits and vegetables are nutritionally the same as raw fruits and vegetables. Moreover, these foods can contribute significantly to a healthy diet and to achieving compliance with dietary guidelines." Public health agencies, including the USDA, the U.S. Department of Health and Human Services (HHS), and the Centers for Disease Control and Prevention (CDC), have all recognized the nutritional contribution of frozen fruits and vegetables by recommending their inclusion in the diet. AFFI respectfully requests frozen fruits and vegetables be included in all federal feeding programs, including USDA's Fruit and Vegetable Snack Program.

Frozen Potatoes

Frozen potato products have and continue to be an important part of school feeding programs. These products provide a valuable source of complex carbohydrates that are an integral part of a healthy diet.

Today, frozen potato producers are formulating frozen potato products to meet required nutrition standards while maintaining a flavor that is popular with students. Frozen potato producers have lowered the sodium, reduced saturated fat and eliminated trans fat from frozen potato products.

There are those that advocate that some foods, including frozen potatoes, should be limited in school feeding programs. The Committee should carefully consider the contributions of frozen potatoes to a healthy diet, and reject the notion that individual foods should be eliminated from or limited in school feeding programs. Importantly, AFFI believes that nutrition standards for schools should take into account the overall contribution of the nutrient base on weekly consumption, rather than individually targeted foods.

Frozen Pizza

As the multiple colors of USDA's MyPyramid healthy eating pyramid guide indicate, the steps to a healthy diet include variety, proportionality and moderation. Pizza provides nutrients from almost every one of the major food groups. Frozen pizza is an excellent source of protein, complex carbohydrates, primary starches, calcium and various vitamins. Pizza's nutritional value is more complex than some detractors would have the public believe. Accompanied by other good choices, pizza can be the cornerstone of a well-balanced meal.

In response to school foodservice requests, the frozen pizza industry has revised product specifications for fat, sodium and sugar to make frozen pizza even healthier. Moreover, frozen pizza has a caloric density less than most bread products, and provides a solid foundation for additional nutrients given the variety of toppings that can be added to a pizza. Vegetables may be left uneaten and their nutrients missed, but atop a slice of pizza they have an enhanced chance of being consumed. Pizzas are a popular, familiar, tasty and child-friendly product. With the addition of whole wheat crusts and vegetable, fruit or meat toppings, pizza can be a nutritional powerhouse.

Conclusions

AFFI respectfully recommends the Committee utilize science as the foundation for school meal standard recommendations. Additionally, national nutritional standards should be established that are clear, reflect current nutritional science, are fairly applied across the board to all foods and take a staged and reasonable implementation approach to nutritional requirements.

For the health conscious, nutrition minded and/or obesity concerned, frozen foods provide attractive nutritional options. For the economically stressed and budget confined, frozen foods provide an affordable option that does not sacrifice nutritional value. For those anxious about food safety, frozen foods provide a secure reliable option that is safe, tasty and healthy. For the highly discriminating food critics populating the school cafeteria, frozen foods provide options that are convenient, nutritious and tasty to the most discerning of palates. AFFI and the frozen food industry look forward to working with the Committee to achieve the goals of the WIC and Child Nutrition Programs by continuing to provide nutritious and healthy foods that are appealing to students.

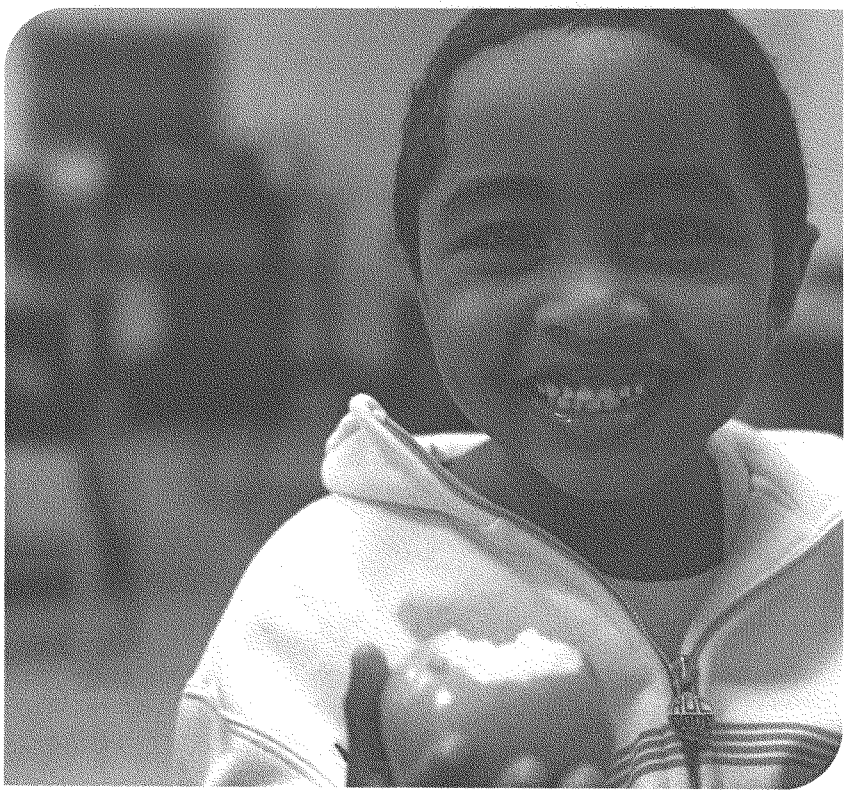
Respectfully submitted,

Kraig R. Naasz
President & CEO
American Frozen Food Institute

Child Food Insecurity: The Economic Impact on our Nation

A report on research on the impact of food insecurity and hunger on child health, growth and development commissioned by Feeding America and The ConAgra Foods Foundation

John Cook, PhD, Project Director
Karen Jeng, AB, Research and Policy Fellow



FEEDING
AMERICA

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INTRODUCTION

We know how to fix the problem of childhood hunger, and we have an opportunity now to build a prosperous future for us all by doing that. Over the past century Americans have built marvelous networks and systems of infrastructure that are necessary to our economy and quality of life. Through creativity, inventiveness, ingenuity and hard work we have made our country a model of success in many areas. For example, we have built a national power grid, telecommunication systems, water systems, transportation systems, and internet systems that are peerless, to list just a few. But we have not yet updated our food system to bring it fully in line with 21st century knowledge and needs.

In many ways the American food system reflects the best of our economic and social accomplishments. The U.S. food industry has achieved levels of productivity and organization that reflect state-of-the-art communication, transportation and management technologies. Its integration with the global economy involves feats of engineering and organization that are unrivaled. But in other very important ways we are still in the 1950s because we never completed the infrastructure investments needed to make sure that all American children always have enough healthy food to provide the solid foundation on which sharp minds and strong bodies are built. As a result, the U.S. economy has handicapped the minds and bodies of much of its workforce and placed severe constraints on its available pool of human capital.

Fortunately, American business leaders are unlikely to stand by idly while the hope and promise of a prosperous and successful future for our children and grandchildren slip away. Throughout our history we have rallied to meet the demands of many serious threats, and there are no compelling reasons why we cannot meet the challenges posed by child hunger.

This report summarizes results of research completed by Children's HealthWatch (formerly the Children's Sentinel Nutrition Assessment Program (C-SNAP)), and by many other researchers, on the impacts of food insecurity and hunger on children's health, growth and development. A large body of research literature, amassed over the past two decades, shows clearly that food insecurity and hunger together with other correlates of poverty, can dramatically alter the architecture of children's brains, making it impossible for them to fulfill their potential.

OBJECTIVES OF THE REPORT

In this report we present the results of Children's HealthWatch's recent research on the associations of food insecurity and hunger, as measured by the US Food Security Scale, with child health, growth and development. In addition, we place these research results within the context of other research on food security and hunger over the past ten years. Several important themes emerge from the research we describe. These include:

Child Hunger is a Health Problem

While every American is morally offended by the existence of childhood hunger, pediatricians and public health professionals see the tragic effects of this unnecessary condition graphically imprinted on the bodies and minds of children;

- Hungry children are sick more often, and more likely to have to be hospitalized (the costs of which are passed along to the business community as insurance and tax burdens);
- Hungry children suffer growth impairment that precludes their reaching their full physical potential,
- Hungry children incur developmental impairments that limit their physical, intellectual and emotional development.

Child Hunger is an Educational Problem

- Hungry children ages 0-3 years cannot learn as much, as fast, or as well because chronic undernutrition harms their cognitive development during this critical period of rapid brain growth, actually changing the fundamental neurological architecture of the brain and central nervous system.
- Hungry children do more poorly in school and have lower academic achievement because they are not well prepared for school and cannot concentrate.
- Hungry children have more social and behavioral problems because they feel bad, have less energy for complex social interactions, and cannot adapt as effectively to environmental stresses.

Child Hunger is a Workforce and Job Readiness Problem

- Workers who experienced hunger as children are not as well prepared physically, mentally, emotionally or socially to perform effectively in the contemporary workforce.
- Workers who experienced hunger as children create a workforce pool that is less competitive, with lower levels of educational and technical skills, and seriously constrained human capital.

> **"The healthy development of all children benefits all of society by providing a solid foundation for economic productivity, responsible citizenship, and strong communities."**
>
> Jack P. Shonkoff, MD, Director
> Center on the Developing Child
> Harvard University

Child Hunger Leads to Greater Health Care Costs for Families and Employers

- *Short-term: hungry children have greater odds of being hospitalized, and the average pediatric hospitalization costs approximately $12,000.*
- *Long-term: results of chronic undernutrition that contribute to high health care costs.*
- *Child hunger leads to greater absenteeism, presenteeism and turnover in the work environment, all of which are costly for employers. Child sick days are linked to parent employee absences, for instance.*

Child Hunger is Totally Preventable and Unnecessary in the USA

- *The federally-funded nutrition assistance infrastructure works: nutrition assistance programs provide the first-line defense against child hunger, if adequately funded.*
- *Good nutrition is just like a good antibiotic or vaccine in preventing illness. The Supplemental Nutrition Assistance Program—SNAP (formerly the Food Stamp Program), WIC, the National School Lunch and Breakfast Programs. Child and Adult Care Food Program. TEFAP and other public nutrition assistance programs are good medicine, but the dose is often not strong enough and the prescription is not for a long enough time period. Many families cannot overcome barriers to access these services which are crucial for health.*
- *Private food assistance programs guarantee that no child falls through the cracks by buttressing, complementing and supporting the public nutrition infrastructure—the Food Bank network makes up the difference in dose required and duration for which it is needed to cure the serious health problem of child hunger.*
- *Working together, in mutually supportive partnership, the national public and private food assistance systems can prevent and eradicate the unnecessary health problem of childhood hunger, if we the people choose to do so.*

- Doctors strongly support this approach to "vaccinating" our children against childhood hunger and to treating them effectively if and when this health problem does occur.
- Fixing the child hunger problem provides an opportunity to make strong, well-educated, healthy children into an engine for growth in the American economy.
- America's Business Leaders can play a central role in helping to make these investments happen.

BACKGROUND

Food is one of our most basic needs. Along with oxygen, water, and regulated body temperature, it is a basic necessity for human survival. But food is much more than just nutrients. Food is at the core of humans' cultural and social beliefs about what it means to nurture and be nurtured.

Food security—defined informally as access by all people at all times to enough food for an active, healthy life—is one of several conditions necessary for a population to be healthy and well-nourished.[1] Food insecurity, in turn, refers to limited or uncertain availability of nutritionally adequate and safe foods, or limited or uncertain ability to acquire food in socially acceptable ways.[2]

Until the mid-1990s, lack of access to adequate food by U.S. households due to constrained household financial resources had been measured by questions assessing "hunger," "risk of hunger," and "food insufficiency." [3, 4, 5, 6, 7] In 1990, an expert working group of the American Institute of Nutrition developed the following conceptual definitions of food security, food insecurity and hunger, which were published by the Life Sciences Research Office (LSRO) of the Federation of American Societies for Experimental Biology.[8]

- **Food Security**: "Access by all people at all times to enough food for an active, healthy life. Food security includes at a minimum: (1) the ready availability of nutritionally adequate and safe foods, and (2) an assured ability to acquire acceptable foods in socially acceptable ways (e.g., without resorting to emergency food supplies, scavenging, stealing, or other coping strategies)."
- **Food Insecurity:** "Limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways."
- **Hunger**: "The uneasy or painful sensation caused by a lack of food. The recurrent and involuntary lack of access to food. Hunger may produce malnutrition over time....Hunger...is a potential, although not necessary, consequence of food insecurity."

These conceptual definitions were operationalized and a scale was developed to measure the operational conditions at the household level in the U.S. population under guidance and sponsorship of the National Center for Health Statistics and the U.S. Department of Agriculture in 1995-97. [9] Consisting of 18 questions, the U.S. Food Security Scale (FSS) is administered annually by the Census Bureau in its Current Population Survey (CPS) with results reported by USDA's Economic Research Service (ERS). These repeated cycles of the FSS now provide a time series of data on food security, food insecurity and hunger in the U.S. population for 1995-2007. [10]

Relatively recently, a Children's Food Security Scale (CFSS) consisting only of the eight child-referenced items in the larger 18-item FSS has been validated by USDA/ERS. The CFSS can be scored and scaled to more directly depict the food security status of children in a household. This child-referenced scale has also been shown to yield higher prevalence of child hunger when administered separately than is obtained from the household-level FSS.[11] The eighteen questions comprising the FSS are shown in Table 1, with the eight items that make up the CFFS in the lower section. Thresholds for the various household and child food security categories are also indicated.

Additional changes were recently implemented by USDA/ERS in the way results from the Census Bureau's annual administration of the FSS are reported.[12] These changes affect terminology used to label the most severe level of deprivation measured by both the household and children's scales by replacing the term "hunger" with the blander (some would say euphemistic) term "very low food security." [13] Because this change is relatively recent, and not uniformly accepted by scientists, policymakers or advocates, we have elected to use the original term "hunger" in this review when referring to the most severe category of food insecurity.

We also present material below that we hope will shed additional light on the meaning of the terms food security, food insecurity and hunger, and how these conditions are related. A goal of that discussion is to clarify what hunger is, and to provide readers with sufficient information about how it is measured to enable reasoned decisions whether the term "hunger" is useful in describing the most severe levels of food insecurity.

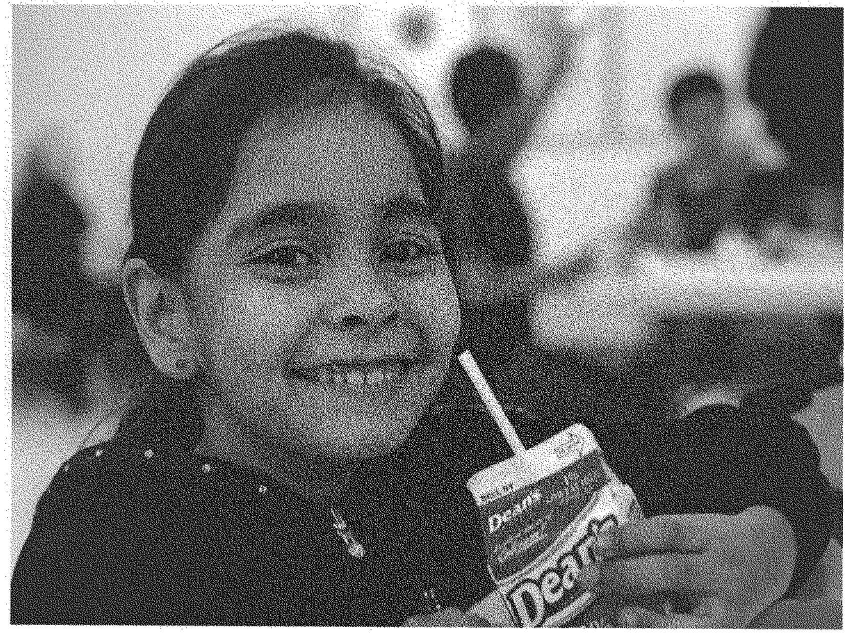
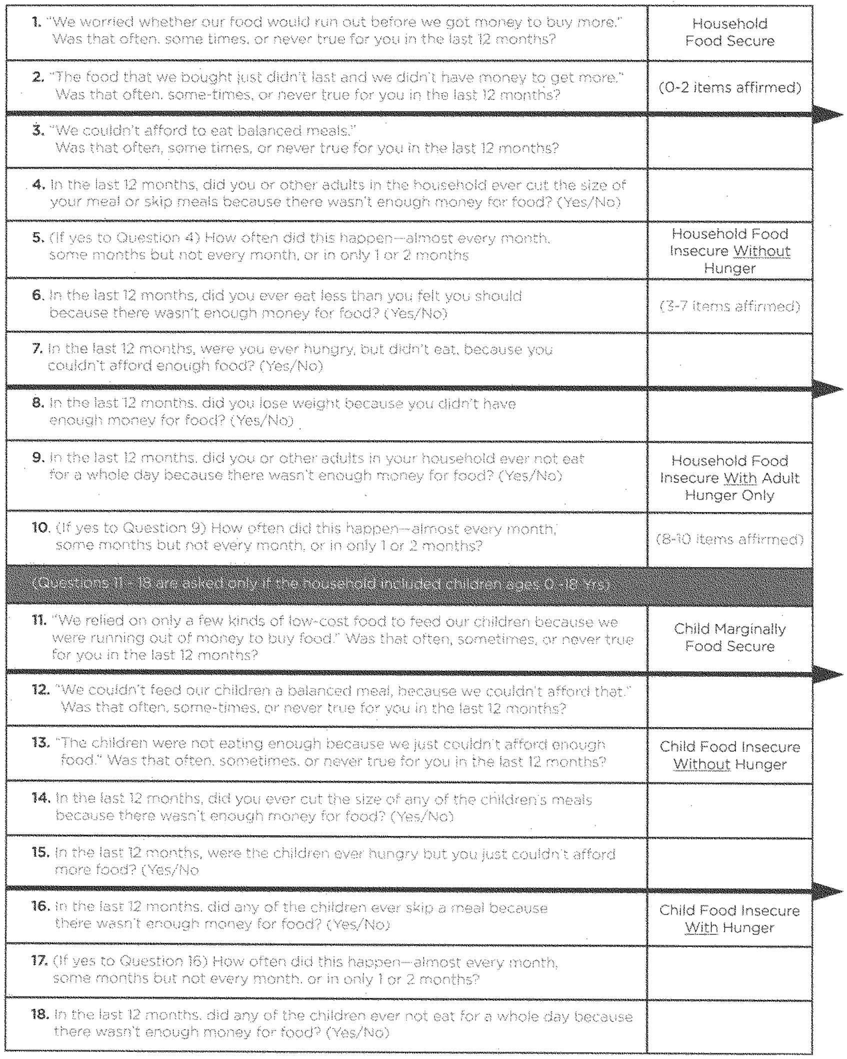


Table 1: Questions Comprising the U.S. Food Security Scale with Child Food Security Scale Questions in the Lower Section



1. "We worried whether our food would run out before we got money to buy more." Was that often, some times, or never true for you in the last 12 months?	Household Food Secure
2. "The food that we bought just didn't last and we didn't have money to get more." Was that often, some-times, or never true for you in the last 12 months?	(0-2 items affirmed)
3. "We couldn't afford to eat balanced meals." Was that often, some times, or never true for you in the last 12 months?	
4. In the last 12 months, did you or other adults in the household ever cut the size of your meal or skip meals because there wasn't enough money for food? (Yes/No)	
5. (If yes to Question 4) How often did this happen—almost every month, some months but not every month, or in only 1 or 2 months	Household Food Insecure Without Hunger
6. In the last 12 months, did you ever eat less than you felt you should because there wasn't enough money for food? (Yes/No)	(3-7 items affirmed)
7. In the last 12 months, were you ever hungry, but didn't eat, because you couldn't afford enough food? (Yes/No)	
8. In the last 12 months, did you lose weight because you didn't have enough money for food? (Yes/No)	
9. In the last 12 months, did you or other adults in your household ever not eat for a whole day because there wasn't enough money for food? (Yes/No)	Household Food Insecure With Adult Hunger Only
10. (If yes to Question 9) How often did this happen—almost every month, some months but not every month, or in only 1 or 2 months?	(8-10 items affirmed)
(Questions 11 - 18 are asked only if the household included children ages 0 -18 Yrs)	
11. "We relied on only a few kinds of low-cost food to feed our children because we were running out of money to buy food." Was that often, sometimes, or never true for you in the last 12 months?	Child Marginally Food Secure
12. "We couldn't feed our children a balanced meal, because we couldn't afford that." Was that often, some-times, or never true for you in the last 12 months?	
13. "The children were not eating enough because we just couldn't afford enough food." Was that often, sometimes, or never true for you in the last 12 months?	Child Food Insecure Without Hunger
14. In the last 12 months, did you ever cut the size of any of the children's meals because there wasn't enough money for food? (Yes/No)	
15. In the last 12 months, were the children ever hungry but you just couldn't afford more food? (Yes/No	
16. In the last 12 months, did any of the children ever skip a meal because there wasn't enough money for food? (Yes/No)	Child Food Insecure With Hunger
17. (If yes to Question 16) How often did this happen—almost every month, some months but not every month, or in only 1 or 2 months?	
18. In the last 12 months, did any of the children ever not eat for a whole day because there wasn't enough money for food? (Yes/No)	

Relationship of Food Insecurity to Poverty

Food insecurity and hunger, as measured by the FSS, are specifically related to limited household resources.[14] Thus, by definition they are referred to as "resource-constrained," or "poverty-related" conditions. Financial resources available to households can include income earned by household members and additional resources derived from cash [a] and in-kind assistance provided by public and private safety-net programs, including public and private food assistance programs, housing subsidies, and energy assistance.[15,16,17,18]

The official definition of poverty for the U.S. population uses money income before taxes and does not include capital gains or noncash benefits (such as public housing, Medicaid, and SNAP). The definition is based roughly on historical estimates of the portion of an average household's income required to purchase a "minimally nutritious diet" (about 30% in the early 1960s). Poverty thresholds, set at three times the amount necessary to buy such a diet, are amounts of money estimated by the federal government to approximate statistical levels of necessity for families of different size and composition (i.e., number of people in the household, and number of children or elderly). Although the cost of living varies widely from state to state and region to region, poverty thresholds do not vary geographically. They are, however, updated annually for inflation using the Consumer Price Index (CPI-U), a broad national index of overall increases in aggregate consumer prices.[b] The official poverty threshold for families of four people, two adults and two children, was $21,027 in 2007. [19] All members of a household with income below this level will be categorized as being in poverty.

POVERTY IS THE MAIN CAUSE OF FOOD INSECURITY AND HUNGER.

- IN 2007, THE OFFICIAL POVERTY THRESHOLD FOR A FAMILY OF 4 WITH 2 CHILDREN WAS $21,027 PER YEAR
- IN 2007, 13.3 MILLION CHILDREN LIVED IN POVERTY
- IN 2006, 12.4 MILLION CHILDREN WERE FOOD-INSECURE

Both the definition of poverty and the poverty thresholds have been criticized on grounds that they do not accurately reflect families true financial resources, nor the amount of money families actually need to be economically self-sufficient.[20] Estimates of minimum income levels required for families to achieve basic economic self-sufficiency range around twice the federal poverty thresholds. [21]

Based on the official poverty definitions, in 2007 (the latest year for which data are available), 37.3 million people (12.5%) lived in households with incomes below the poverty thresholds in the U.S. Of these, 13.3 million were children under age 18 years, and 5.1 million were children under 6 years of age. Subpopulations with highest prevalence of poverty are people in female-headed households with no spouse present (28.3%), Blacks (24.5%), Latinos (21.5%) and children under age 6 years (20.8%).[22] From 2000 to 2004 the poverty rates for all major ethnic groups increased steadily, though they declined slightly from 2005–2006 and increased in 2007 (**Figure 1**).

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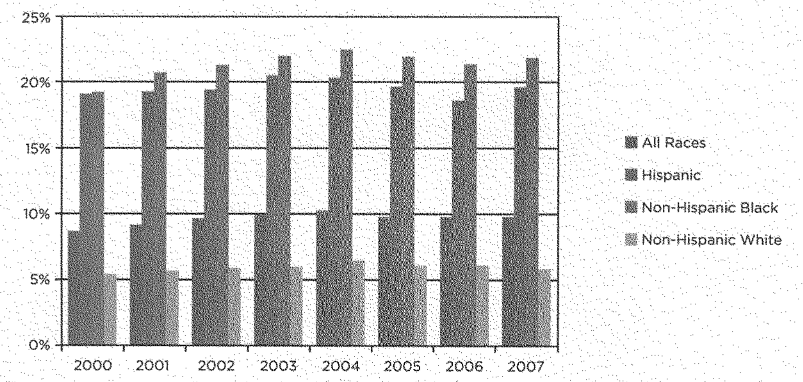
[a] Most federal sources of cash assistance available to families and children are managed by agencies within the Department of Health and Human Services. Descriptions of these financial assistance programs can be found at http://www.dhhs.gov/children/#income, viewed June 25, 2007.

[b] Moreover, though an average U.S. family currently spends only about 12% of its total annual expenditures on food, implying a poverty threshold nearer eight (100% Ð 12%) times the cost of a minimally nutritious diet instead of three times, this "multiplier" has not been updated since its conception in the early 1960s. See "The Development of the Orshansky Thresholds and Their Subsequent History as the Official U.S. Poverty Measure," by Gordon M. Fisher (1992), at http://www.census.gov/hhes/www/povmeas/papers/orshansky.html, viewed July 13, 2007.

Figure 1: Proportion of U.S. Families with Incomes Below Poverty by Race/Ethnicity, 1999-2007*

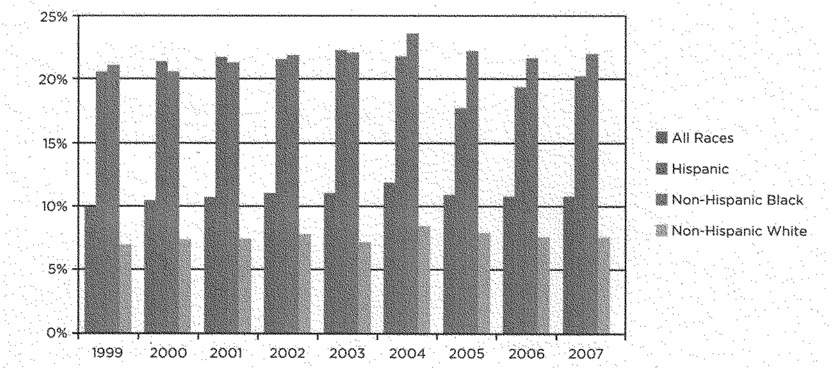


* Includes households with and without children.
Source: U.S. Census Bureau Current Population Survey, various years.

Though the populations affected by poverty and food insecurity overlap, they are not identical. Not all poor people are food insecure and the risk of food insecurity extends to people living above the federal poverty level.[23] In 2007, the latest year for which data are available, 36.2 million people in the U.S. (12.2%) lived in food-insecure households, 24.3 million in households without hunger and 11.9 million with hunger (Figure 2). Of the 36.2 million food-insecure people in the U.S. in 2007, 12.4 million were children under 18 years of age. As with poverty, subpopulations with the highest prevalence of household food insecurity are Blacks (22.0%), Latinos (22.3%), people in households with children under 6 years of age (17.7%), and single-mother households (30.4%).[24]

In 2007, 39.9% of all people in the U.S. with incomes below the poverty thresholds were food insecure. Of all people with incomes equal to or above the poverty threshold but below 130% of poverty (gross income cutoff for SNAP in most states), 30.3% were food insecure, while 21.3% of all people with incomes equal to or above 130% but below 185% of poverty (gross income cutoff for WIC) were food insecure. Only 5.7% of all people with incomes at or above 185% of poverty were food insecure. These prevalence estimates suggest that for some families "safety net" programs, such as the national food assistance programs, housing and energy subsidies, and in kind contributions from relatives, friends, food pantries, or other charitable organizations, not included in the federal poverty calculations, may partly decrease the risk of food insecurity. Families that do not receive public benefits for which they are income eligible (either because of bureaucratic barriers or because the programs are not entitlements and are insufficiently funded to reach all who are eligible) may be more likely to be food insecure. Moreover, many families whose incomes exceed the eligibility cut-off for these programs may still be unable to avoid food insecurity without assistance if the costs of competing needs such as energy or housing are overwhelming. From 1999 to 2004 the prevalence of food insecurity increased steadily for all major race/ethnic groups, but declined in 2005 and increased among Hispanic households in 2006, and among all three groups in 2007 (**Figure 2**) on next page.

Figure 2: Proportion of U.S. Households that are Food Insecure by Race/Ethnicity: 1999-2005*



* Includes households with and without children.
Source: USDA/ERS Food Security in the U.S., various years.

Averaging data over the years 2005–2007, USDA/ERS calculated state-level estimates of the proportion of households in each state that was food insecure over this period. The lowest state-level household food insecurity prevalence was 6.5% in North Dakota; the highest was 17.4% in Mississippi. In 34 states more than 10% of all households were food insecure. The prevalence of food insecurity with hunger was lowest in North Dakota at 2.2% and highest in Mississippi at 7.0%. Eleven states had average prevalence rates of food insecurity with hunger of 5% or higher over this period.[25]

What are food security, food insecurity, and hunger, and how are they related?

Food Security: Food security is the condition of having regular access to enough nutritious food for a healthy life. In the United States, the concept of food security is assessed using the U.S. Food Security Scale, an official, government-sponsored evaluation instrument that captures food security at the household level. The Census Bureau administers the U.S. Food Security Scale annually in its national Current Population Survey, and the USDA Economic Research Service analyzes the data and publishes a report on Food Security in the U.S each year.

Food Insecurity: Food insecurity is the condition of not having regular access to enough nutritious food for a healthy life. High and low levels of food insecurity are differentiated based on the duration and severity of food insecure periods. In the U.S., having access to nutritious food requires that the food be physically present in the local food system (e.g. supermarkets; other food stores; markets; restaurants; and food vendors), and that households have sufficient financial resources to purchase it. Thus poverty is the major proximal cause of food insecurity in the U.S.

The Food Insecurity Continuum:

- On the least severe end of the spectrum, food insecurity manifests as household members' worries or concerns about the foods they can obtain, and as adjustments to household food management, including reductions in diet quality through the purchase of less-expensive foods. There is generally little or no reduction in the quantity of household members' food intake at this level of severity, but micro-nutrient deficiencies are common.
- As the severity of food insecurity increases, adults in the household often reduce the quantity of their food intake, to such an extent that they repeatedly experience the physical sensation of hunger. Because adults tend to ration their food as much as possible to shield the children in the household from the effects of food insecurity, children do not generally experience hunger at this level of insecurity, though their diets tend to be extremely poor in nutrients.
- In the most severe range of food insecurity, caretakers are forced to frequently reduce children's food intake to such an extent that the children experience the physical sensation of hunger. Adults, in households both with and without children, consistently experience more extensive reductions in food intake at this stage.

Hunger: Hunger, defined as the uneasy or painful sensations caused by a lack of food, occurs when food intake is reduced below normal levels. Hunger is both a motivation to seek food and an undesirable consequence of lack of food. Though experienced by everyone episodically, hunger becomes a social problem when the means of satisfying the drive to seek food, and of relieving the uncomfortable or painful sensations that accompany hunger, are not available or accessible due to lack of resources. Relevant questions about child hunger include:

- If an adult respondent to the FSS answers "Yes" to any of the following three questions, would you say the children in the household experienced hunger?

1. In the last 12 months, did you ever cut the size of any of the children's meals because there wasn't enough money for food? (Yes/No)
2. In the last 12 months, were the children ever hungry but you just couldn't afford more food? (Yes/No)
3. In the last 12 months, did any of the children ever skip a meal because there wasn't enough money for food? (Yes/No)
4. In the last 12 months, did any of the children ever not eat for a whole day because there wasn't enough money for food? (Yes/No)

Do Food Insecurity and Hunger Matter?

Food insecurity and hunger are intrinsically undesirable and harmful, that is they are undesirable and harmful in and of themselves. But even more important, for this report especially, they also are harmful to the human capital formation and accumulation of those who experience them. That harm ultimately leads to higher costs of several kinds, lost productivity, and constraints on success among American businesses.

Child food insecurity and hunger are especially harmful during the first 3 years of life, because this is the sensitive period in which the foundation is being laid that will support human capital formation throughout the school years, and on into adulthood. The kinds of nutrition, care, stimulation and love children receive during these critical first three years of life determine the architecture of the brain and central nervous system. These structures form the basic foundation on which each child's future is constructed.

Children's school readiness is built on growth, development and experiences during the first three years of life. Success in kindergarten builds on readiness achieved in years 0-3; success in grade school builds on growth, development and learning in pre-school and kindergarten, and so on.

> **"So the sobering message here is that if children don't have the right experiences during these sensitive periods for the development of a variety of skills, including many cognitive and language capacities, that's a burden that those kids are going to carry; the sensitive period is over, and it's going to be harder for them. Their architecture is not as well developed in their brain as it would have been if they had the right experiences during the sensitive period. That's the sobering message."**
>
> Jack P. Shonkoff, MD
> Harvard University School
> of Public Health

Recent research has shown that each of these stages involves important human capital formation, and that each builds on the human capital accumulated during the previous stage. And while each stage is important, none is more important than the years 0-3. Those years, and the prenatal period, set the stage for the rest of a person's life, and they are the most vulnerable to stress and damage that can result from food insecurity and hunger. In the following section we summarize the basics of human capital theory and suggest that it provides a useful framework for considering why business leaders should care about child hunger.

AN ECONOMIC FRAMEWORK FOR CONSIDERING THE CONSEQUENCES OF FOOD INSECURITY AND HUNGER AMONG CHILDREN

Human Capital Theory

Human capital theory, developed and articulated by Gary Becker in the early 1960s, is a very useful framework for considering the economic consequences of childhood food insecurity.[26] Elaborated by a host of economists since, the theory envisions the unique capabilities and expertise of individuals as a stock of "human capital," useful to individuals and firms as an input into desirable work and activity. A person's human capital stock is a primary determinant of the kinds of employment they can successfully compete for, their consequent earning capacity, and lifetime earnings.

Initial Human Capital Endowment

Every individual is born with a particular human capital endowment comprised of their genetic material as expressed in interaction with the environments in which they grow and develop. This interaction begins during the prenatal period, when development is heavily influenced by maternal nutrition, stress, and healthcare, among other factors.

From conception until death, each person undergoes a continuous process of human capital formation and destruction. Early developmental periods, especially the periods of rapid brain and central nervous system (CNS) development during the first three years of life, are critical in determining a person's potential for human capital formation later in life. Circumstances that impair or interfere with health, growth and development during these periods can have lasting negative impacts on human capital formation throughout life.

The Role of Education in Human Capital Formation

In Becker's formulation of human capital theory, education is the primary vehicle for human capital formation. Other forms of human capital formation include training (on and off the job), experience (on and off the job), investments in health, outreach and extension programs, life experience, migration, and the individual's search for understanding.

Health and the Enhancement, Preservation and Destruction of Human Capital

Human capital is a stock, in that it accumulates rather than flows (as income does). However, this particular stock is very dynamic. It can be increased by additional education, training, investments in health, improved nutrition, and adoption of a healthier lifestyle. Similarly, it can be diminished by injury and trauma, disease and illness, malnutrition, risky behavior, and unhealthy lifestyles.[27]

Factors influencing child health can both impair human capital formation and diminish human capital already formed. Examples of liabilities to human capital development in early childhood include:

- Malnutrition;
- Disease and illness;
- Injury and trauma;
- Inadequate or non-existent healthcare;
- Exposure to environmental toxins;
- Exposure to and/or victimization by violence;
- Chronic illness; and
- Familial stress.

Many risks to children's human capital are correlates of poverty and food insecurity.

Households as Producers

Household production theory, an elaboration of human capital theory, views each family as a production unit that uses inputs to produce things the household needs and wants for its collective satisfaction, utility or well-being. Each household combines resources, such as purchased goods, household labor, time, energy, and human capital, to produce things for consumption by family members.

Household Production of Human Capital

Human capital itself is a very important output produced by families via the household production process. Parents combine their human capital with other inputs (time, attention, books, toys, food, etc.) using care and interaction to nurture critical human capital formation in their children. Taking education as an example, children in turn build gradually upon their sum total of human capital to accumulate the stock necessary for school readiness: capacity for future learning and successful physical, social, and psychological adaptation to new environments.

These capacities are heavily determined by the extent and quality of parent-child interactions and the level of stimulation in the home environment (household inputs). Early deficits in household inputs can diminish human capital in young children, predisposing them to failure in school and diminishing their potential for forming and expressing future human capital as successful, productive members of the workforce and society.[28]

Food Security as Human Capital and Household Production Input
Food security, like health, is itself an important form of human capital, and a critical input into household production of other forms of human capital such as good health, cognitive, psychological and physical development and growth, self-confidence, social skills, and school readiness. Food secure families can access enough nutritious food to promote healthy growth and development, or human capital formation, in their children. Food insecurity, on the other hand, means a shortage or absence of inputs that are essential to the optimal formation of human capital in children.

Beyond impairments caused by inadequate food and nutrients, children in food insecure households also suffer ill effects due to the family stress that frequently accompanies, and is often caused by, food insecurity. Parental physical and mental health problems associated with food insecurity impair parent-child interaction, limit parents' elaboration of children's first efforts at speech, reduce quantity and quality of stimulation available in the home environment, and interfere with children's optimum human capital formation.

> **"The current economic and housing crises have made it absolutely imperative that we invest in young children today. To have the economy we want in the future, we must invest in children now to help them become productive, successful adults. In particular, research shows that children are likely to pay a steep price for the nation's housing crisis, because of the disruption it causes in their lives and their educational success."**
>
> Robert Dugger,
> Managing Director,
> Toudor Investment Corporation,
> Advisory Board Chair,
> Partnership for America's
> Economic Success

CHILD FOOD INSECURITY AND HUNGER ARE HEALTH PROBLEMS

Food insecurity influences health and development through its impacts on nutrition and as a component of overall family stress. The condition of food insecurity includes both inadequate quantities and inadequate quality of nutrients available. At less severe levels of food insecurity, household food managers (usually mothers) trade off food quality for quantity to prevent household members, especially children, from feeling persistently hungry.[29] Several kinds of social infrastructures can influence the relationships between food insecurity and child health, growth and development by helping to prevent food insecurity from occurring, or by moderating its effects once it occurs.

Poor nutrition, and by extension food insecurity, has been shown to influence health and well-being throughout the life cycle, from the prenatal period on into elder years. [30, 31, 32, 33, 34, 35, 36] In addition, effects of food insecurity on adults in households with children can adversely impact those children in a variety of ways, including diminution of parents' energy for providing care and developmental stimulation. Parental (especially maternal) depression has been associated with food insecurity, and in many contexts, not limited to those involving food insecurity, such depression has been linked with adverse impacts on parenting, parent-child interaction and attachment, child growth, development, health and well-bring.[38, 39, 40, 41]

The Prenatal and Neonatal Periods
Adequate prenatal nutrition is critical for normal development of the fetal body and brain. Though a large volume of research has confirmed the importance of nutrition during the prenatal and neonatal periods,[42,43,44,45] far fewer studies have specifically addressed the role of food security per se for this part of the life cycle. Food insecurity has been associated with low birth weight deliveries,[46] and with a variety of psychosocial risk factors in moderate to high-risk pregnancies with observable dose-response relationships (increasingly higher psychosocial risks with increasing severity of food insecurity).[47] Evidence on the influence of food insecurity in prenatal development remains largely indirect, deriving from the large body of evidence for the critical role of healthful nutrition during this period.

It is noteworthy that a large number of recent studies have examined prenatal nutrition and care within a broader scope that includes birth spacing and nutrition and care between births.[48, 49, 50, 51, 52, 53] Motivated in part by persistently high rates of low birth weight and preterm births in some U.S. subpopulations, a growing recognition of the limits of prenatal care alone in reducing these problems has emerged, with increasing attention being paid to preconception and internatal care.[54] Amid this emerging view of maternal health are expressions of concern about the effects of food insecurity on nutrition and health during the internatal period.[55] Of particular concern is the risk of food insecure mothers entering pregnancy with insufficient iron stores and with diets inadequate in folate. Poor iron and folic acid status have been linked to preterm births and fetal growth retardation respectively. [56] Prematurity and intrauterine growth retardation are critical indicators of medical and developmental risks which not only impact children's short-term well being but extend into adulthood where they have been linked recently to obesity, adult onset diabetes, and risk of cardiac disease.[57] A woman's diet inadequate in folate in the periconceptual period has also been clearly associated with neural tube defects and possibly with other birth defects.[58] For low-income mothers, especially Black, Latino and single mothers, food insecurity is a highly prevalent risk factor generally, including during internatal periods.[59, 60]

Low Birthweight

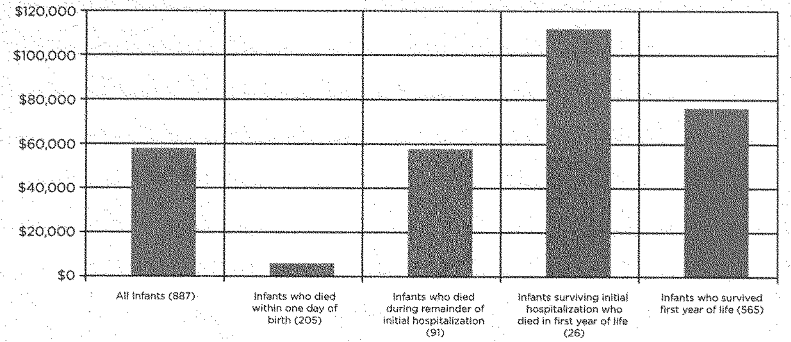
Overall fetal growth is significantly influenced by maternal nutrient intake. Birthweight, in turn, is strongly correlated with perinatal and infant mortality, with low birthweight heightening the risk of mortality.[61]

Low birthweight also has a long-term impact upon infant health and growth trajectories. Infants who are born small for gestational age remain shorter and lighter and have smaller head circumferences than their peers through early childhood.[62] Low birthweight is associated with poor long-term outcomes in areas including:

- **Adult Height**: A 10% increase in birthweight results in between .5 and .75 cm increase in adult height. Height is important as, in many cases, it is a proxy for social and health conditions early in life. Shorter stature correlates with shorter average lifespan, and it is believed that the underlying cause for this correlation is poor early-life conditions, including inadequate nutrition and infection. Shorter adult stature also correlates with lower adult socioeconomic status (SES) and education, which in turn influence earnings and type of employment.[63]
- **IQ at 18 years of Age**: Low birthweight is associated with lower age 18 IQ.[64]
- **Educational Attainment**: A 10% increase in birthweight increases a child's odds of graduating from high school.[65]
- **Adult Earnings**: Increased educational attainment increases an individual's expected earnings as an adult.[66]

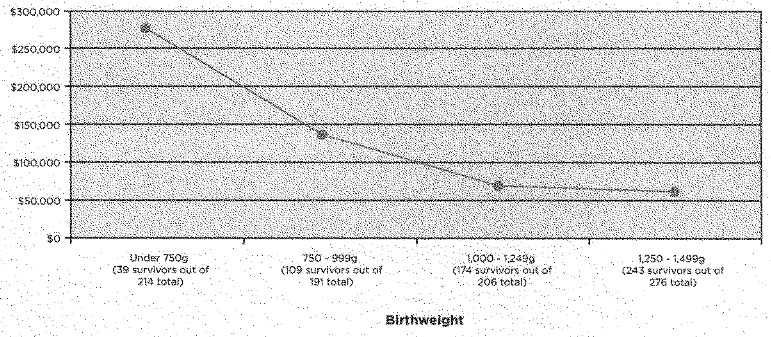
Treating low birthweight infants is a costly endeavor. The average aggregate cost of caring for a very low birth weight infant over his or her first year of life was $59,730.[67] The variations of cost can be seen in **Figure 3** below.

Figure 3: Average Cost of Caring for Very Low Birthweight Infants During Their First Year of Life.[68]



Infants who survive their initial hospitalization but die before their first birthday are the most expensive to treat ($112,120 on average).[69] Infants surviving to age one cost an average of $76,850, with the cost difference being driven largely by the cost of rehospitalization ($5,290 per infant). Infants who do not survive their initial hospitalization cost an average of $6,310 (those surviving one day) or $58,800 (those dying during the remainder of initial hospitalization).[70] The cost-effectiveness of treatments varies by the infant's birthweight, with the heavier infants having the best chance of survival, needing the least intervention, and therefore costing the least. This can be seen in **Figure 4** below.

Figure 4: Cost-Effectiveness of Treating Very Low Birthweight Infants Improves with Higher Birthweights.[71]



Note: Cost are in constant 1987 dollars, rounded to the nearest hundred

Preterm birth also has a negative impact on the employment behavior of the parents. Mothers of preterm or low birthweight babies took a longer maternity leave, reduced their hours at work, or left the workforce altogether to care for their child.[72] This decrease in productivity was average associated with a decrease in family income of 32%.[73] In a 1996 to 2001 study done in Toronto, researchers found that mothers from the lowest-income neighborhoods were 25% more likely to have a preterm birth than mothers in the richest neighborhoods, and 53% more likely to have an underweight baby at full-term.[74] As a result, the 32% decrease in family income due to loss of productivity from caring for a preterm or low birthweight baby creates a proportionally greater decrease in low income families who are at highest risk for preterm or low birthweight babies.

Beyond general growth delay, maternal undernutrition has significant effects on specific physical systems in the developing fetus. Severe food insecurity late in the gestational period impairs fetal body, organ, and cellular growth. The adrenals, placenta, and liver are most affected by maternal undernutrition; women who begin their pregnancies underweight and experience low pregnancy weight gain tend to give birth to children with disproportionately low weights for some body organs and small adrenal and liver cells, the classic physiological picture of undernutrition.[75]

Early Childhood: Ages 0-3 Years

A relatively large number of studies have examined associations between food insecurity and child health and development in this age group, many conducted by Children's HealthWatch.[c] An ongoing multi-site pediatric clinical research program, Children's HealthWatch has conducted household-level surveys and medical record audits at seven central-city medical centers, including acute and primary care clinics (Baltimore, MD; Minneapolis, MN; Philadelphia, PA and Washington, DC) and hospital emergency departments (Boston, MA; Little Rock, AR; and Los Angeles, CA) since 1998.[d] Primary adult caregivers accompanying children 0 to 36 months old seeking care are interviewed by trained interviewers in private settings during waiting periods.[e] Children's weight and, if possible, length are recorded at the time of the interview.

The Children's HealthWatch survey instrument is composed of questions on household characteristics, children's health and hospitalization history, maternal health, maternal depressive symptoms, participation in federal assistance programs, energy insecurity, and changes in benefit levels. In addition, the Children's HealthWatch interview includes the U.S. Food Security Scale,[76, 77, 78] and recent cycles of data collection since July 2004 have added the PEDS (Parents' Evaluation of Developmental Status—a well-validated and reliable standardized instrument that meets the American Academy of Pediatrics standards for developmental screening).[79] These studies suggest complex relationships between food insecurity and participation of families with young children in public income maintenance and nutrition programs. They also indicate similarly complex relationships between participating in these programs and food insecurity, health, growth, and development of young children.

Food Insecurity and Adverse Health Outcomes in Young Children

By 2003 a large body of research literature had confirmed a range of adverse health and development outcomes associated with malnutrition in young children, and a few had found food insufficiency (a pre-cursor to the food security measures), hunger and risk of hunger related to poor health in children (ages < 18 years).[80, 81, 82, 83, 84] However, there were no studies directly examining whether food insecurity as measured by the new FSS is independently associated with bad health outcomes among children in this critical age group (0-3 years). Children's HealthWatch tested this hypothesis and found that, after adjusting for confounders, food-insecure children had odds of having their health reported as "fair/poor" (versus "excellent/good") 90% greater, and odds of having been hospitalized since birth 31% greater than similar children in food-secure households.[85] We also found a dose-response relation between fair/poor health status and severity of food insecurity, with higher odds of "fair/poor" health at increasingly higher levels of severity of food insecurity. In the overall Children's HealthWatch sample receipt of SNAP attenuated the effects of food insecurity on this outcome, but did not eliminate it.[86] These results were the first to show that food insecurity is independently associated with adverse health outcomes in children ages 0-3 years.

Child Food Insecurity Intensifies Adverse Effects of Household Food Insecurity

Many households with children are categorized by the FSS as food insecure at the household level, but since none of the child-referenced items are affirmed, the households can not be said to show specific evidence of child food insecurity per se. Typically, as has been shown elsewhere, adult caregivers in food-insecure U.S. households ration food in order to spare children from suffering the feeling of hunger, though this often results in detrimental overall reductions in the quality and variety of foods available in the household. [87, 88, 89, 90, 91, 92]

In the Children's HealthWatch sample of 17,158 caregiver-child dyads interviewed between 1998 and 2004, 10% reported household food insecurity only, and 12% household and child food insecurity, with child food insecurity measured by the CFSS (Table 1, page 5).[93] Compared to food-secure children, after adjusting for confounders, those with only household food insecurity (HFI) had significantly higher odds of fair/poor health (51% higher) and being hospitalized since birth (19% higher), while those with both household and child food insecurity (H&CFI) experienced even greater adverse effects (100% greater odds of fair/poor health and 23% higher odds of hospitalization respectively). The presence of CFI in addition to HFI resulted in a statistically significant

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[c] Dr. Cook is one of the Principal Investigators in the Children's HealthWatch study group.

[d] Sites in Los Angeles and Washington, DC are currently inactive.

[e] This age group was chosen for sampling because its special vulnerability makes it a sentinel population for adverse health outcomes in pediatric populations related to constrained household resources and changes in social policies and economic conditions. Because of their locations in inner-cities the Children's HealthWatch sites serve populations with high prevalence of low income families, those most affected by social policy changes.

increase in the odds of fair/poor health above the odds when only HFI was present (from 1.51 to 2.00). Though the presence of CFI in addition to HFI resulted in an increase in odds of hospitalization from 1.19 to 1.24, this increment was not statistically significant.[94]

Participation in the SNAP (formerly the Food Stamp Program) modified the effects of food insecurity on child health status (odds of fair/poor health), reducing, but not eliminating them. Children in FSP-participating households that were HFI only had adjusted odds of fair/poor health 24% lower than those in similar non-FSP households, while children in FSP-participating households that were H&CFI had adjusted odds of fair/poor health 42% lower than those in non-FSP households.[95]

These results, like previous ones, indicate that the relationship between food insecurity and the health status of very young children is such that the adverse effects of food insecurity worsen as its severityincreases. They also suggest that SNAP benefits, like a therapeutic drug prescribed in inadequate doses, appear to attenuate but not fully reverse this association.

Child Food Insecurity and Iron Deficiency

Iron deficiency, and iron deficiency anemia (IDA), are the most prevalent nutritional deficiencies in the U.S. and worldwide.[96, 97] Iron deficiency in early life has been linked to concurrent and persistent deficits in cognition, attention, and behavior even after treatment. Several recent studies have reported a prevalence of IDA in children up to 18% in some high-risk subpopulations in the U.S.[98, 99, 100, 101] One study found that joint or separate participation in the WIC and SNAP reduced the risk of iron deficiency. The link between these child nutrition programs and iron deficiency confirms a recent Children's HealthWatch study that examined associations between child food insecurity (CFI) and IDA in children ages 6-36 months.[103] Infants ages <6 months old and children with established diagnoses known to increase risk of anemia (e.g., low birth-weight, HIV/AIDS, sickle cell disease, or lead level >10 mcg/dl) were excluded from this study. In logistic regressions adjusted for a range of possible confounders, food insecure children had adjusted odds of having IDA 140% greater than food secure children. Only household food insecurity, and not child food insecurity, was examined in this study.[104]

IDA is a troublesomely common problem among at-risk pediatric populations. The Pediatric Nutrition Surveillance System (PedsNSS), a national program run by the Centers for Disease Control and Prevention, found a 14% prevalence of anemia in 2001 among children under 5 years old in its sample comprised mostly of low-income, nutritionally at-risk children.[105] In severe cases, hospitalization is required; in 2003, over 100 children under the age of 5 were hospitalized for dietary iron-deficiency anemia, at an average cost of $5,573 per child. [106]

LINKAGES BETWEEN FOOD INSECURITY AND OBESITY

Research on food insecurity and overweight has, in the past, mostly focused on adults and school-aged children.[107] However, a growing body of research about young children demonstrates a strong correlation between early food insecurity and later overweight and obesity. The pathways through which this correlation acts are not yet fully defined, but thus far appear to involve quality and quantity of food consumed; health and feeding practices; and caretaker depression.

Connecting Food Insecurity and Obesity

Families with children, especially those with young children, are the group most likely to be food insecure.[108] In turn, children whose families are food insecure are more likely to be at risk of overweight (>85% weight-for-age) or obesity as compared to children whose families are food secure.[109] Children experiencing child food insecurity, the most severe level of food insecurity, are at even greater risk of being overweight, and this trend has definitively begun by the preschool years (ages 3-5).

Research using the measure of 'food insufficiency', which captures the equivalent of severe food insecurity, found that if a family with young children had experienced food insufficiency at any point during the child's toddler years, the child was 3.4 times more likely to be obese at 4.5 years old.[110] This increase in risk was greater than the 2.5-fold risk increase associated with having an overweight or obese parent. Low birthweight (LBW) (<2500g) was also a significant risk factor, with LBW babies having odds more than 3 times greater of being obese at the end of the preschool years than their non-LBW peers. Because LBW is associated with nutritional deficiency in utero, it appears that food insecurity even prenatally increases a child's risk of overweight. Most strikingly, children exposed to the early-life double damage of low birthweight and family food insufficiency had odds 27.8 times higher than their peers of being overweight or obese at age 4.5; normal birthweight babies who experienced family food insufficiency had odds 1.8 times higher, and large babies (>4000g) who experienced family food insufficiency had odds 5.7 times higher.[111]

Health Effects and Costs of Obesity

Obesity is highly correlated with many health problems, among them cardiovascular disease, hypertension, diabetes, and joint degeneration.[112, 113, 114] Disturbingly, these problems of middle-age and older adults are being found at younger and younger ages. A recent study in Georgia found that even adolescents with mid-range body mass displayed increases in blood pressure, arterial stiffness, and other signs of cardiovascular trouble.[115] In another study, overweight adolescents had more Medicaid claims for diabetes, asthma and respiratory problems than normal weight adolescents.[116] The total estimated medical cost in the United States for obesity-related disease management among 6-17 year old children reached $127 million in 2003, and continues to rise along with the prevalence of overweight and obesity within this age group.[117] Beyond immediate healthcare costs, the early onset of health problems associated with obesity shortens the lifespan of affected individuals, contributes to increased rates of morbidity, and influences their lifetime earning potential. Unfortunately, though overweight and obesity are documented in toddlers through school-age, little research has been conducted on the consequences and costs of obesity for children younger than six.

FOOD INSECURITY, WHICH IS RELATED TO BOTH UNDER-NUTRITION AND OVER-NUTRITION, IMPACTS NEARLY ONE IN EVERY FIVE U.S. CHILDREN.

- IN 2007, THE MOST RECENT YEAR FOR WHICH DATA IS AVAILABLE , 12.4 MILLION U.S. CHILDREN WERE FOOD INSECURE. THIS IS 16.9% OF ALL U.S. CHILDREAN
- YOUNGER CHILDREN ARE AT EVEN GREATER RISK OF FOOD INSECURITY, WITH 18.9% OF ALL CHILDREN IN HOUSEHOLDS WITH CHILDREN UNDER 6 YEARS OF AGE FOOD-INSECURE IN 2007.

Obesity and its Effects on Emotional and Cognitive Development

In addition to physical consequences, obesity has a substantial negative impact on the emotional and cognitive well-being of young children. Overweight and obese children are often stigmatized by their peers, and stigmatization can profoundly influence their psychological and social development.[118] Young children who are overweight or obese typically become overweight adolescents, and body image is often a major focus at this time of life, leading to poor self-esteem, emotional health problems and issues with social adjustment among this group.[119] One study using the National Longitudinal Study of Adolescent Health found that among children 12 to 14 years-old, overweight and obese children were significantly more likely to be depressed, report low self-esteem, and have poor school/social functioning compared to normal weight children.[120]

Among obese adolescents, lower levels of self-esteem have been associated with increased rates of sadness, loneliness, nervousness, smoking, and alcohol consumption.[121] One study of adolescents found that obese children were more likely to isolate themselves socially and report serious emotional problems. These problems in turn led to direct loss of human capital through:

- Suicide: Obese girls were nearly twice as likely to have attempted suicide as their non-obese peers.[122]
- Academic underachievement: Obese adolescents were more likely to perceive themselves as below average students, and boys were twice as likely to expect to quit school.[123]

Long-Range Consequences of Obesity

If overweight and obese children are unable to reduce their Body Mass Index (BMI) as they grow older, they face an adulthood where the costs of obesity can include diminished employment opportunities and reduced incomes.

- A study of former welfare recipients found that morbidly obese White women trying to transition from welfare to work were less likely to find employment, spent more time receiving cash welfare, and had lower monthly earnings than similar non-obese women.[124]
- Another study by the same author found that among White females, a difference in weight of about 65 pounds was associated with a 9-percent difference in wages.[125] This effect of weight on earnings is similar in magnitude to the effect of 1.5 years of education, or 3 years of work experience, on wages earned.
- A third study found that among adults, a one-point increase in BMI over time was associated with a $1,000 decrease in net worth on average, holding other factors such as income constant.[126] One major reason for this association was that overweight and obese adults tended to leave school earlier than their peers.

Obesity is thus an offshoot of food insecurity that has lasting consequences for the long-term economic productivity and security of individuals.

Food Insecurity, Maternal Depression, and Child Health

Maternal depression is strongly related to child development in a variety of ways, including reduced ability to provide needed care, impaired mother-child interaction and attachment, and child neglect and abuse.[127, 128, 129, 130, 131, 132] Several recent studies have found associations between food insecurity and maternal depression.[133, 134]

A recent Children's HealthWatch study examined associations among mothers' positive depressive symptoms (PDS), food insecurity and changes in benefits from federal assistance programs.[135] Using a subsample of 5,306 mother-child dyads seen at three of the Children's HealthWatch sites, we found that mothers with PDS had odds of reporting household food insecurity 169% greater, fair/poor child health 58% greater, and child hospitalizations 20% greater than mothers without PDS, after adjusting for possible confounders. In addition, controlling for the same covariates, mothers with PDS had odds of reporting decreased welfare support 52% greater, and odds of reporting loss of SNAP benefits 56% greater than mothers without PDS.[136]

These results suggest that maternal depression may be an indirect pathway by which household food insecurity exerts negative influence on child health and development. It is not possible to determine the direction of causality from these results, nor to rule out the possibility of some amount of dual causality. Additional longitudinal research is needed to determine whether and under what circumstances maternal depression temporally precedes food insecurity, and vice versa.

The Impacts of Program Participation on Food Insecurity

In a study examining associations between participation in the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) and indicators of underweight, overweight, length, child's health status, and food security in children ages ≤12 months, Children's HealthWatch researchers found that infants that did not receive WIC benefits because of access problems were more likely to be underweight, short, and perceived as having fair/poor health, compared with WIC recipients, after adjusting for possible confounders.[137] Though these two groups did not differ significantly on food security status after adjusting for covariates, children in both were more likely to be food insecure than children whose caregivers did not perceive a need for WIC. These results supported findings from other research indicating that low-income infants ≤12 months of age benefit from participation in the WIC program. [138, 139, 140]

Another Children's HealthWatch study examining the relationships between receiving housing subsidies and nutritional and health status among low-income food-insecure children ages < 3 years living in rented housing found that children in food-insecure renting families not receiving housing subsidies had significantly lower weight-for-age compared to those in families receiving subsidies. In addition, compared to food-insecure children in subsidized housing, those in non-subsidized housing had odds of having weight-for-age z-scores more than two standard deviation units below the mean 111% greater. [141] These findings help inform another dimension in the understanding of how household food security interacts with other survival needs to influence children's health, in concert with recent studies showing strong associations between housing conditions and health among low-income children.[142, 143, 144]

Association Between Food Insecurity and Early Childhood Developmental Risk
A recent Children's HealthWatch study evaluated the relationship between household food security status and developmental risk among 2010 children ages 4-36 months based on responses to the Parent's Evaluations of Developmental Status (PEDS).[145] After controlling for established correlates of child development, including mothers' depressive symptoms and education, food insecure children in this age group were found significantly more likely to be identified by their caretakers as being at developmental risk than similar children in food-secure households.[146]

Hospitalization
All the negative health effects of food insecurity act in concert to increase young children's risk of hospitalization. Between the ages of 0 and 3, children living in food insecure households are one-third more likely to have a history of hospitalization than their food secure peers.[147] In the United States in 2003, nearly 400 children under the age of 5 were hospitalized with primary diagnoses of nutritional deficiencies, at an average cost of approximately $16,000 per child.[148] Just one of those diagnoses alone—protein-calorie malnutrition—cost Medicaid approximately $1.25 million among 0-to-4-year-olds in 2003. Cases in which nutritional deficiency was the primary diagnosis capture only a small sample of the children whose hospitalizations were precipitated by food insecurity. Because food insecurity weakens the immune system, food insecure children are more vulnerable to infections, and end up hospitalized with illnesses that their food secure peers fight off successfully either on their own or with basic primary care.

Hospitalization is but one of a large complement of costs incurred by children, their families, the community/workforce, and the broader economy due to the physical effects of food insecurity. More frequent doctor's visits, and increases in other medical expenses, present a heavy cost burden to families already strapped for financial resources. Many food insecure families cannot afford health insurance, meaning that the burden of their medical costs shifts largely onto state and federal taxpayers. The time cost associated with caring for an ill child means missed days of work for parents, presenting a cost to employers and employees alike. In the worst circumstances, chronic illness in children from lower-income families may cause a parent to lose a job if the job does not allow for any or enough sick days.

School-age and Adolescence
Over the past decade a modest but steadily accumulating body of research has examined the influence of food insecurity on physical and mental health and academic, behavioral, and psychosocial functioning of preschool and school age children. These studies have used several different measures of food insecurity including a single screening question developed by the USDA and referred to as "the USDA food sufficiency question," a scale developed by the Community Childhood Hunger Identification Project prior to release of the U.S. FSS, and the FSS itself. These measures differ in the questions they include, in the wording of some questions and in psychometric properties.[149] While each research report addresses a somewhat different set of correlates of food insecurity and related constructs, there is consistency in the basic findings that emerge from applications of these measures regarding adverse effects on physical and mental health, academic performance and behavioral and psychosocial problems in pre-school and school-age children.

Several studies using data on responses to the USDA food sufficiency question in the Third National Health and Nutrition Examination Survey (NHANES III) examined associations between household food sufficiency and children's health, school performance and psychosocial functioning. One study, consistent with the CSNAP food insecurity work summarized above, found food insufficiency associated with higher prevalence of fair/poor health, and iron deficiency, and with greater likelihood of experiencing stomachaches, headaches and colds in 1-5 year olds.[150] Another found that 6-11 year old children in food insufficient families had lower arithmetic scores, were more likely to have repeated a grade, to have seen a psychologist and to have had more difficulty getting along with other children, than similar children whose families were food sufficient. This study also found teenagers from food insufficient families more likely than food-sufficient peers to have seen a psychologist, been suspended from school, and to have had difficulty getting along with other children.[151] A third study showed 15-16 year olds from food insufficient households significantly more likely to have had dysthymia, thoughts of death, a desire to die, and to have attempted suicide. [152]

Another set of studies used a food security measurement tool developed by the Community Childhood Hunger Identification Project—CCHIP[153] (a validated scale to assess hunger in children developed prior to, and partly incorporated into the FSS) to examine associations between hunger and physical and mental health in school-age children. One of these studies, using data from implementation of the CCHIP scale in nine states, found that children under age 12 years categorized as hungry or at-risk of hunger were twice as likely as not-hungry children to be reported as having impaired functioning by either a parent or the child themselves. Teachers reported significantly higher levels of hyperactivity, absenteeism, and tardiness among hungry/at-risk children.[154]

A second CCHIP study used a sample of 328 parents and children from families with at least one child under the age of 12 years. Parents with a child between ages 6 and 12 years completed a Pediatric Symptom Checklist (PSC). This study found children categorized as hungry by the CCHIP scale were more likely to have clinical levels of psychosocial dysfunction on the PSC than either at-risk or non-hungry children. Analysis of individual items from the PSC found that most all behavioral, emotional, and academic problems were more prevalent in hungry children, and that aggression and anxiety had the strongest degree of association with hunger.[155]

A third CCHIP study used data on externalizing and internalizing behaviors and anxiety/depression from the Child Behavior Checklist, and chronic health indicators adapted from the National Health Interview Survey, Child Health Supplement in a sample of 180 preschool and 228 school age children in Worcester, MA. This research found that, after adjusting for confounders, severe hunger was a significant predictor of chronic illness among both preschool age and school-age children, and significantly associated with internalizing behavior problems, while moderate hunger was a significant predictor of health conditions in preschool children. Severe hunger was also associated with higher reported anxiety/depression among school-age children, after adjusting for confounders.[156]

Finally, a small set of fairly recent studies use data from administration of the FSS in national and local surveys to examine associations of food insecurity with health, growth and development after the first three years of life. A recent study used data from the new Early Childhood Longitudinal Survey Kindergarten cohort (ECLS-K) to test the hypothesis that food insecurity is associated with overweight among kindergarten-age children. The authors found no significant association of food insecurity with overweight in this cross-sectional study, in any of several configurations of regression models. The authors conclude that though there are many very sound reasons to be concerned about food insecurity in kindergarten-age children, their results indicate that concern about overweight should not be one.[157]

A second study from the ECLS, included data from the kindergarten and third grade administrations in a longitudinal assessment of how food insecurity over time is related to changes in reading and mathematics test performance, weight and BMI, and social skills in children.[158] This much more elaborate and extensive longitudinal study found food insecurity in kindergarten associated with lower mathematics scores, increased BMI and weight gain, and lower social skills in girls at third grade, but not for boys, after controlling for time-varying and time-invariant covariates in a lagged model. Using difference score and dynamic models based on changes in predictors and outcomes from kindergarten to third grade, the authors found that children from persistently food-insecure households (food insecure at both kindergarten and third grade years) had greater gains in BMI and weight than children in persistently food-secure households, after controlling for covariates, though these effects were only significant for girls in stratified analysis. Also among girls, but not boys, persistent food insecurity was associated with smaller increases in reading scores over the period than for persistently food-secure girls.

In dynamic models, for households that transitioned from food security to food insecurity over kindergarten to third grade (became food insecure), the transition was associated with significantly smaller increases in reading scores for both boys and girls compared to children from households remaining food secure. For children transitioning from food insecurity to food security (becoming food secure) the transition was associated with larger increases in social skills scores for girls, but not for boys. Similarly, in difference models when children from households that became food insecure were compared with children who became food secure, food insecurity was associated with smaller increases in reading scores for both boys and girls, though they were only significant for girls.

In gender-stratified difference models examining BMI, weight and social skills, becoming food insecure was associated with significantly greater weight and BMI gains for boys but not for girls. Becoming food insecure was associated with greater declines in social skills scores for girls but not boys.

The authors of this rather complicated study conclude that it provides the strongest empirical evidence to date that food insecurity is linked to developmental consequences for girls and boys, though these consequences are not identical across gender. Particularly strong associations are found between food insecurity and impaired social skills development, reading performance, and increased BMI and weight gain for girls, though the effects on BMI and weight gain appear to differ depending on whether the girls are persistently food insecure or their status changes over time. The longitudinal and dynamic nature of the models used and the extensive controls for confounders at the household and individual levels lead the authors to conclude that the most plausible interpretation of their findings is that food insecurity in the early elementary years has developmental consequences that may be both nutritional and nonnutritional.[159]

A third study used data from a cross-sectional telephone survey of households including 399 children ages 3-17 years from 36 counties of the Delta region of Arkansas, Louisiana and Mississippi to examine associations between household food insecurity and proxy- or self-reported child health-related quality of life (CHRQOL). Researchers used the 23-item Pediatric Quality of Life Initiative (PEDS QL) survey which yields a total score and two subscale scores – physical and psychosocial functioning. This study found food insecurity significantly associated with total child CHRQOL and physical function after adjusting for confounders.

Children ages 3-8 years in food-insecure households were reported by parents to have lower physical function, while children ages 12-17 years reported lower psychosocial function. Black males in food-insecure households reported lower physical function and lower total CHRQOL than those in food-secure households.[160]

"The Milken Institute believes that investing in human capital is a key tenet in any national, organizational or individual path to sustainable prosperity"

Mike Klowden,
CEO and President
The Milken Institute.

"The current economic and housing crises have made it absolutely imperative that we invest in young children today. To have the economy we want in the future, we must invest in children now to help them become productive, successful adults. In particular, research shows that children are likely to pay a steep price for the nation's housing crisis, because of the disruption it causes in their lives and their educational success "

Robert Dugger,
Managing Director,
Toudor Investment Corporation
Advisory Board Chair,
Partnership for America's
Economic Success

A fourth study used data from the 1997 Panel Study of Income Dynamics Child Development Supplement to compare the risk of a child 5-12 years of age being at or above the 85th percentile on age-gender specific BMI in food-secure and food-insecure households when controlling for participation in SNAP, the National School Lunch Program and the School Breakfast Program. The authors found that food-insecure girls who participated in all three of these food assistance programs had odds of being at risk of overweight (85th percentile $\leq$ BMI < 95th percentile) 68% lower than food-insecure girls in nonparticipating households, after controlling for confounders. No significant differences were found for girls in food-secure households, nor for boys in either food-secure or food-insecure households. [161]

CHILD HUNGER IS AN EDUCATIONAL PROBLEM

Cognitive Development

Food insecurity in early childhood can have a long-term negative impact on the cognitive and socio-emotional development of a child, ultimately impairing his or her productivity and economic potential. Children who enter school without proper nourishment and support are at an early disadvantage and struggle to keep up with their more advantaged peers. One study found that kindergartners from food insecure homes not only entered school with lower math scores, but also learned less over the course of the school year.[162] Even children considered marginally food secure meaning that they had enough food but their families struggled to meet their needs—lagged behind their peers. [163] Food insecurity thus depresses both the starting point and the upward trajectory of a child's education from the moment he or she enters the kindergarten classroom.

Learning deficits in the earliest years of education have a cumulative effect as children continue through elementary school and beyond. Data from the Early Childhood Longitudinal Study—Kindergarten (ECLS-K) Cohort, which followed more than 21,000 children from kindergarten through third grade, showed that by the third grade, children who had been food insecure in kindergarten had lower reading and mathematics scores than their peers who had not been food insecure in kindergarten. For example, children in families that had not been food insecure in kindergarten had an average gain of 84 points in reading, compared with a 73-point gain among children who had experienced food insecurity. The data also demonstrated the corrective effect of federal nutrition programs, which can work to decrease or eliminate food insecurity in recipient households. Gains in reading and mathematics scores were higher for girls who entered SNAP between kindergarten and third grade than for girls who left SNAP during that time.[166] This demonstration of the inverse relationship between food supplementation and cognitive delay shows once again the dynamic effect of nutrition upon cognitive development in young children.

Food insecurity has a continuing negative impact on the cognitive and academic development of children as they grow older. Educational achievement through the middle and secondary school years depends on students mastering basic skills and building on their knowledge over time. Food insecure children learn at a slower rate than their peers, and that fact coupled with their initial delay leaves them further and further behind as they progress through the educational system. Studies have found that elementary school students from food insecure homes have significantly lower mathematics scores and are more likely to have repeated a grade than their peers from food secure homes.[167]

Case Study: Special Education

Food insecurity increases the likelihood that a child will be judged to need special educational services; at the worst end of the spectrum, children who are not only food insecure but are classified as hungry are twice as likely as those who are not hungry to be receiving special education services, and twice as likely to have repeated a grade.[168] According to the U.S. Department of Education, special education services cost an extra $5,918 per pupil in school-year 1999-2000. As the national average per pupil cost of public education is around $6,800 (fiscal year 2001), the additional cost of special education services brings the total cost of educating a special needs child to nearly double the annual expenditure for a child without special needs.[169] Once they begin to receive special education, children typically stay within the special needs system for the remainder of their school career, so the nearly $6,000 additional cost accrues annually until they leave the school system. For a special-needs kindergartener, then, progress through the eighth grade alone represents approximately $54,000 in additional expenditures on the part of the school system, and indirectly, on the part of the taxpayer.

Socio-emotional and Behavioral Consequences

When their ability to provide a nutritious diet and regular meals for their children is uncertain, parents feel anxiety and frustration, leading to high levels of stress. Stress within the household in turn takes a toll on young children, and can cause serious behavioral and emotional issues that can impair mental health and social adjustment. Using the ECLS-K, researchers have found that even after controlling for other variables, food insecure kindergarteners were rated by their parents as having a poorer emotional state (less self-control, higher levels of sadness, loneliness, impulsiveness, and overactivity), and by both their parents and teachers as having lower social ability scores, in comparison to their food secure peers.[170] Another study, the CCHIP, found that school-age children who are hungry and at-risk for hunger are more likely to have problems with hyperactivity, absenteeism, and generally poor behavioral and academic functioning than their not-hungry peers.[171]

Older children continue to show the negative effects of food insecurity. Elementary school-aged children who are food insecure not only have an increased prevalence of negative behavioral and health outcomes[172], but are more than twice as likely to have seen a psychologist.[173] By the time they are teenagers, food insecure children are twice as likely as their peers to have seen a psychologist, twice as likely to have been suspended from school, and have greater difficulty getting along with other children.[174]

The damaging effects of the lack of a stable food source are even greater in children classified as hungry, the most severe level of food insecurity. For both preschoolers and school-aged children, child hunger is associated with higher rates of internalizing problems and child anxiety.[175] By elementary school, researchers have found that children who are hungry are four times more likely than non-hungry children to have a history of needing mental health counseling; seven times more likely to be classified as clinically dysfunctional; seven times more likely to get into fights frequently; and twelve times more likely to steal.[176] Behavioral problems like aggression and stealing often lead to contact with the criminal justice system. Besides the economic and emotional toll crime takes on its victims and society, the public also bears the substantial costs of incarceration. For 2006, the U.S. Justice Department estimates that it cost an average of $63 per day to imprison an inmate, or nearly $23,000 each year.[177] As many criminals cycle in and out of the justice system over their lifetimes, the costs can multiply dramatically. Though food insecurity is only one factor in the complex mix of influences that predispose individuals to criminal behavior, its very real influence on brain architecture and chemistry at an early age, and its impact on social and emotional health during critical years of socialization make it responsible for at least a fraction of the enormous costs that crime imposes on the broader society.

Children who struggle in school with lower grades, difficult social interactions, and repeating grades are also at a much greater risk of dropping out in high school, an outcome with dramatic economic consequences. In 2006, the median annual income for a high school dropout was only $18,868; that was $8,516 less than a high school graduate and $27,567 less than a college graduate.[178] A study of dropouts in Massachusetts estimates that over the course of their working career, a dropout will earn $500,000 less than a high school graduate and almost $2 million less than a college graduate.[179] As low-income workers are less likely to hold jobs with benefits like health insurance, pensions or retirement plans, they fall even further physically and financially behind those who graduate. Society, in turn, bears the costs of increased health problems, lost worker productivity, and lost tax revenue as individuals achieve and earn less.

Lifetime Earnings

A person's earning capacity is determined largely by educational attainment in the U.S. and elsewhere. When human capital deficits (e.g., health problems, including those correlated with food insecurity) interfere with cognitive development, achievement of school readiness, learning or academic achievement, they can impact educational attainment and reduce one's earning capacity. Reduced earning capacity, in turn, reduces that person's lifetime earnings, and their economic contribution to the social and economic systems.

Such impairments of one person's earning capacity do not only impact that person and her/his contribution to society, they also can impact their children's human capital accumulation and earning capacity. This is the pattern suggested by the term "cycle of poverty," in which the impacts of one generation's poverty present barriers to the next generation's achievement of its potential (Karp, 1993).[180]

Table 2 shows median annual income levels for people ages 25 years and above with different levels of educational attainment in the U.S. in 2007, along with the net present value of simplified hypothetical earnings streams at these levels over 40 years (out to retirement at age 65 years). The median and lifetime earnings for earners with professional degrees (medical, legal, etc.) are nearly five times as great as those for earners without a high school degree.

These lifetime earning-stream estimates are very conservative since they do not include pay raises or investment earnings over the 40-year period. Yet they illustrate the magnitude of differences in lifetime earnings arising from different levels of human capital accumulation. They also illustrate the magnitude of forgone income that can result from failure to attain one's academic potential. Food insecurity problems have been shown to adversely impact school performance and academic achievement. To the degree that food insecurity is a factor inhibiting educational attainment, it also limits lifetime earnings and the contribution such forgone earnings would make as they multiplied and rippled through the economy.

TYPES OF COSTS ASSOCIATED WITH FOOD INSECURITY

Food insecurity imposes several kinds of costs on individuals, families, and the socio-economic system. As described above, food insecurity in the U.S. is predominantly a consequence of poverty, though research over the past decade has shown clearly that food insecurity and poverty are not congruent conditions.

Given food insecurity's strong associations with poverty, and with other factors correlated with poverty, it is extremely difficult to isolate the portion of particular economic costs that is attributable solely to food insecurity. As a result, we take care to avoid specifying cost magnitudes in cases where costs are influenced by food insecurity, but not known to have arisen solely and specifically from food insecurity.

Table 2: Median Income Levels of People 25 Years and Over by Level of Educational Attainment, 2006 and Net Present Value of Lifetime Earnings at Each Median Income Level [181]

Education Attainment	Median Annual Income (Standard Error)	Net Present Value of Lifetime Earnings Over 40 Working Years At Median Earning Level (Discount Rate = 3.3%)
Total	$33,907 ($200)	
Less than 9th Grade	$18,868 ($290)	$415,731
9th to 12th Non-graduate	$20,506 ($149)	$451,822
High School Graduate	$27,384 ($102)	$603,369
Some College, No Degree	$31,789 ($125)	$700,626
Associate Degree	$35,274 ($218)	$777,215
Bachelor's Degree	$46,435 ($201)	$1,023,1321
Masters Degree	$55,445 ($346)	$1,221,655
Doctorate Degree	$78,212 ($1,972)	$1,723,295
Professional Degree	$85,857 ($4,263)	$1,891,743

Source: U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplement, 2007.

Direct Costs of Food Insecurity

Direct costs come from expenditures, directly related to either the causes or consequences of food insecurity, which would not be made in the absence of food insecurity. The costs of the public and private food assistance systems may be direct costs, as are the costs of medical care for illnesses or conditions resulting from orexacerbated by food insecurity. In FY 2006 the cost of the U.S. public food assistance system was approximately $53 billion.[182] The cost of the private emergency food assistance system has been estimated at about 10% of the public food assistance system, or about $5.2 billion per year.[183] The total costs of medical care directly related to food insecurity are unknown. This report focuses on costs due to consequences, rather than costs of already-implemented measures. Such costs include the costs of professional care for health and development problems resulting from, or exacerbated by, food insecurity.

Indirect Costs of Food Insecurity

Food insecurity imposes indirect costs in a variety of ways. One previously mentioned example is the cost of special education expenditures that arise at least in part due to impacts of food insecurity on children's physical or mental development, school readiness, academic performance and educational attainment. In 2006, federal on budget funds for Special Education were $11.46 billion, and some part of that was attributable to food insecurity and hunger. The ultimate indirect cost incurred by society from food insecurity is the loss or reduction of human capital in the overall workforce.

Cost-Benefit Evaluations

Costs are not inherently "bad." In fact, compelling arguments can be made that anything of value to humans has costs associated with it. The important question is always whether the benefits derived are greater than the costs. While we recognize that there are several kinds of values, in this paper we focus mainly on economic value. Moreover, we do not attempt to complete overall cost-benefit analyses, only to point out important categories of costs associated with food insecurity.

THE DOCTOR'S VIEWPOINT

Doctors strongly support this approach to "vaccinating" our children against childhood hunger, and treating them effectively if and when this health problem does occur. For physicians and medical researchers, SNAP "is one of America's best medicines to prevent and treat childhood food insecurity." 184 Children's HealthWatch research has shown that very young children who live in food insecure house holds, even those meeting the level of only mild food insecurity, are two-thirds more likely to be at risk for cognitive, motor or socio-emotional problems on screening tests when compared to those living in food secure households.185 Dr. Diana Cutts, Children's HealthWatch lead researcher for the Minneapolis site, said in testimony before the Committee on Agriculture, Subcommittee on Department Operations, Oversight, Nutrition, and Forestry that "Nutrition assistance programs, such as the Food Stamp Program and WIC, are the medicines needed to treat food insecurity and these accompanying illnesses, but the programs need to be dosed at levels that cure rather than just diminish the problem. The programs are also critical and economically sound investments on the health end of the equation, as they provide the physiological building blocks necessary for proper growth, health, development, and learning...preventive efforts are the best way to avoid the tangible and long-lasting costs of food insecurity in childhood." Doctors believe that no child deserves to be burdened with the consequences of food insecurity, a condition that is preventable with society's positive efforts.

CONCLUSION

Taken together, the studies summarized in this report offer solid evidence that food insecurity (or analogous earlier measures) is associated with a range of adverse health, growth and development outcomes in children across the age range 0-18 years, although the relationships are complex, with some variability from study to study. Age, ethnicity, and gender, as well as multiple other factors, including program participation, contribute to this variability.

Food insecurity, even at the least severe household levels, has emerged as a highly prevalent risk to the growth, health, cognitive, and behavioral potential of America's poor and near poor children. The threshold levels of severity for adverse effects of food insecurity on health and development in young children occur before the appearance of readily identifiable clinical markers such as underweight. The research reviewed here provides evidence that the effects of food insecurity worsen as its severity worsens, and that child food insecurity and hunger are associated with worse consequences than household food insecurity alone. However even at the lowest levels of severity Children's HealthWatch data suggest that, at least for babies and toddlers, household food insecurity is an established risk factor for health and development. This leads to the very troubling conclusion that for infants and toddlers food insecurity is an "invisible epidemic" of a widely prevalent and serious condition known to exist and to pose serious risks to child health and development, and whose remedy is well-understood and cost-effective, but is being withheld from those at greatest risk.

Food insecurity can occur and inflict harm at any or all parts of the life-cycle. However, the particular vulnerability of infants and toddlers ages 0-36 months undergoing especially rapid physical growth and neurocognitive development, provides a special opportunity for protecting and positively influencing the remainder of the life-cycle. Moreover, the apparent heightened susceptibility of older girls to the negative impacts of food insecurity in multiple domains suggests that it is particularly urgent to decrease this risk among those who will become mothers of the next generation of children.

Of the many interlocking forms of deprivation experienced by poor and near-poor children in the United States, food insecurity is one of the most readily measured as well as one of the most rapidly remediable through policy changes. Our country, unlike many others in the world, is clearly capable of producing and distributing sufficient healthful food to all its inhabitants, constrained only by political will.

We clearly know how to fix the problem of food insecurity and the harm it does to children, and we have an opportunity now to do that. Food insecurity and hunger damage the architecture of children's brains, and that makes it extremely difficult for them to ever reach their full potential as effective workers and members of society. As a result of that we all lose. But American business leaders have the means and ingenuity to prevent this from happening. By doing that, and ending child food insecurity and hunger, they can ensure a prosperous future for us all.

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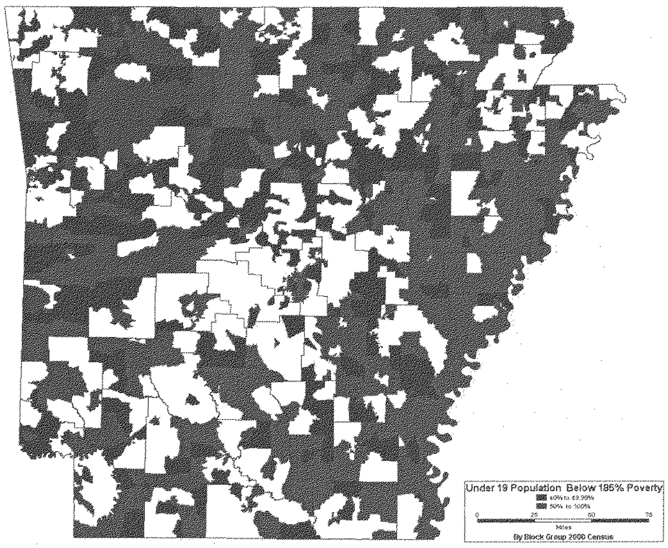
Arkansas

Expanding Access to Child Nutrition Programs

Improving the Area Eligibility Test: 40 Percent of Children Rather Than 50 Percent Eligible for Free and Reduced Price Lunch


Under 19 Population Below 185% Poverty
40% to 49.99%
50% to 100%
0
25
50
75
Miles
By Block Group 2000 Census

The red areas on the map are currently eligible. If area eligibility was lowered to 40 percent, the blue areas would become eligible.

Child Nutrition Reauthorization Priority

Congress is preparing to take up child nutrition reauthorization this year. One of the Food Research and Action Center's top recommendations is to improve the area eligibility test from its current 50 percent to 40 percent. This change would considerably expand low-income children's access to nutritious food.

What is Area Eligibility?
Federal nutrition programs offer reimbursement for snacks and meals for all children in afterschool and summer programs and child care homes that are located in a low-income area, defined as an area with more than 50 percent of children eligible for free or reduced price school meals. This 50 percent area eligibility test is the most restrictive test the programs have ever had. Prior to 1981, for example, the threshold for an area participating in Summer Food was 33 percent.

Why Improve Area Eligibility to 40 Percent?
The 50 percent eligibility test means that many low-income children have lost access to nutritious meals and snacks. Rural and suburban areas have an especially difficult time meeting the 50 percent requirement because poverty is less concentrated. In addition, the threshold for the nutrition programs should be made consistent with other federal education funding streams that support the same afterschool and summer programs, such as 21st Century Community Learning Centers and Title I school-wide programs, so that federal education dollars are not spent on food and programs have consistency. Improving the threshold to 40 percent would increase access to nutritious food for children and reduce the administrative burden for programs.

Prepared by the Food Research and Action Center

FEEDING AMERICA

Formerly named
America's Second Harvest

Child Nutrition Reauthorization "Statement of Principles"

Feeding America is a member of the Child Nutrition Forum, a diverse group of national organizations that represent the following types of organizations: anti-hunger, religious, education, medical, nutrition, school, and food. The members of the Forum have joined together in support of a "Statement of Principles" to guide child nutrition reauthorization efforts in 2009. The Statement urges Congress to support increased funding for child nutrition reauthorization legislation to ensure program access by underserved children, enhance the nutritional quality of food served, provide adequate meal reimbursements, modernize technology and simplify program administration.

Statement of Principles for Child Nutrition Reauthorization

Congress has a unique opportunity in the upcoming reauthorization of the child nutrition programs to improve access, meal quality and nutrition for millions of children, particularly low-income children in child care (the Child and Adult Care Food Program - CACFP), in school (breakfast and lunch programs), during out-of-school time (afterschool, on weekends and during the summer), and at home (the WIC Program). Thousands of diverse national, state and local organizations are committed to a reauthorization bill that has a bold vision to eliminate child hunger. These organizations are now joined by a President-elect who during the campaign has set the goal of ending child hunger by 2015. To that end, these organizations are committed to passage of a strong child nutrition reauthorization bill in 2009.

The extraordinarily successful, cost-effective child nutrition programs play a critical role in helping children, especially those in low-income families, achieve access to quality nutrition, child care, educational and enrichment activities while improving their overall health, development, and school achievement. In addition, the adult component of CACFP provides needed nutrition assistance to elderly and impaired adults. However, federal support for these programs has not always kept pace with children's need for these programs, food cost inflation, the costs of delivering services, or increased scientific knowledge.

A well-conceived, adequately funded reauthorization bill can reduce hunger and food insecurity in America, help reduce childhood overweight and obesity, improve child nutrition and health, and enhance child development and school readiness. To this end we call on the Administration and Congress to enact a reauthorization bill that:

1) assures and strengthens program access and supports participation by underserved children and communities;

2) enhances nutrition quality and provides adequate meal reimbursements; and

3) modernizes technology and simplifies program administration and operation.
A substantial investment of new funding must be included in the Federal budget to achieve these goals. Without new program investments, it will be impossible for Congress to build upon the successes of the 2004 reauthorization. With enhanced Federal support, priorities for the 2009 Child Nutrition reauthorization should include:

I. Improving access to nutritious foods in schools, child care centers and homes, in afterschool programs, on weekends, during the summer, and in the home.
School Meal Programs: Numerous studies document the positive effect school breakfast has on reducing hunger and improving nutrition, classroom behavior, test scores, grades, and school attendance. Through expansion of breakfast programs, including "universal" and in-classroom programs in all low-income areas, all children can receive breakfast at no charge to ensure that many more of them begin the day with the nutrition they need to succeed. Federal funding for breakfast commodities, currently only available to the school lunch program, also would support efforts to provide nutritious breakfasts to more children.
In addition, under the current school meals fee structure, many students from working poor families cannot afford the reduced-price meal charge. Free meal eligibility should be expanded so that children from households with incomes up to 185 percent of the national poverty line can receive meals at no charge.

Child Care and Out-of-School Time Programs: Through CACFP, summer food and school meals programs, providers offer meals and snacks, combined with enriching recreational and educational out-of-school time activities, to preschoolers and to school-aged children after school and in the summer. CACFP provides essential nutrition and monitoring of care for young children in child care centers and family child care homes. Current area eligibility guidelines for family child care homes and afterschool and summer programs are inconsistent with other federal programs and leave many low-income families without access to the nutrition supports, especially in rural areas. Eligibility guidelines and the reimbursement structure need to be broadened to serve more children. In addition, suppers should be made available nationwide through afterschool programs in low-income areas to provide food, supervision, and educational and enrichment activities as more parents work and commute long hours. Reauthorization should also include strategies and resources to provide more nutrition assistance for children vulnerable to hunger on weekends and when schools are not in session. As programs expand to address the needs of participants, appropriate training and technical assistance also will be necessary to ensure meal quality and effectiveness.

WIC provides low-income at-risk pregnant and postpartum mothers and young children with critical nutrition services, health and social service referrals, and culturally appropriate nutritious foods that contribute to their overall health and well-being. Assuring access for all eligible families contributes to healthy pregnancies, improved birth outcomes, positive impacts on the incidence of childhood overweight and obesity, improved readiness for school, and reduced health care costs. As a discretionary program, it is critical for Congress to support WIC's current eligibility rules and nutritional support so that infants and young children continue to experience the full complement of WIC's health benefits.

II. Enhancing the nutritional environment to promote healthy eating habits for women and children.

Child nutrition programs play a critical role in addressing one of our nation's most serious public health concerns -- childhood obesity and related health problems. As food costs rise, families, schools and child care, afterschool and summer food providers struggle to provide healthy meals for children.

National nutrition standards, consistent with the Dietary Guidelines, should be established for foods and beverages sold outside of the school meals programs. USDA should assist state and local school food service programs to work toward a consistent national interpretation of the most recent Dietary Guidelines for Americans while it completes the regulatory process for its new school meal standards. Improved nutritional health for our children can be achieved by increasing meal reimbursements to help schools, sponsors and providers improve meals and snacks and increasing children's access to fruits and vegetables in all forms (including those sourced from regional farms), whole grains and low-fat milk and reduced-fat dairy products. The success of the WIC program in improving child health and nutrition outcomes is well-documented. Retaining current WIC eligibility rules and nutrition support is critical to promoting that success. In addition, Congress has an opportunity to further contribute to WIC's success by preserving the scientific basis for the WIC food package and ensuring that the recommendations of the Institute of Medicine (IOM) are fully implemented. To that end, Congress should direct USDA to provide the full complement of foods recommended by the IOM for the new WIC food packages including yogurt and the full amount of fruit and vegetables the IOM determined was necessary for nutritionally sound WIC food packages. Moreover, Congress should refrain from dictating the addition of any foods, or increases in the amounts of foods, beyond the specific recommendations of the IOM.

Nutrition education funding for all child nutrition programs also will provide children at all stages of growth and development with the skills necessary to make lifelong healthy choices. Promoting and teaching healthy eating is essential to addressing childhood obesity and other diet-related health problems. Congress supported nutrition education and promotion by authorizing the creation of a USDA Team Nutrition Network in the 2004 Child Nutrition Reauthorization. Now, funds should be appropriated to carry out those provisions.

III. Modernizing and streamlining program operations to improve program integrity and efficiency.

Across all programs, steps should be taken to streamline program operations, allow more cross program certification, increase flexibility, and maximize the use of technology and innovation to reduce barriers to eligible families and children and to reduce the administrative burden for service providers.

Recent congressional efforts to ease the paperwork burdens in the Summer Food Service Program have begun to attract more sponsors and children to this underutilized program. Additional resources should be available in areas with access barriers (e.g. transportation problems). To improve the accuracy of the school meals programs without impeding program access or overly burdening school personnel, Congress should also strengthen and expand direct certification for school meals (enrollment based on data matching) and expand options that eliminate or reduce paper applications (electronic applications and alternative data collection systems, e.g., use of neighborhood or district-wide census data).

Growth in the WIC Program requires policy makers to expand their commitment to technology enhancements – management information systems that meet core function needs and are Electronic Benefit Transfer-ready -- making it easier for mothers and young children to access WIC foods, protect program integrity and achieve economies and efficiencies in the delivery of services.

Conclusion:

In 1946, Congress passed the National School Lunch Act as a "measure of national security, to safeguard the health and well-being of the Nation's children and to encourage the domestic consumption of nutritious agricultural commodities." Since then, Congress has improved the child nutrition and WIC programs to better serve children and families and adjust to changes in our families, workplaces, schools and communities. The upcoming child nutrition reauthorization provides an opportunity to build on this strong tradition and to ensure the continued health and well-being of our nation's most vulnerable population – our children.

December 30, 2008

OBESITY, FOOD INSECURITY
AND THE FEDERAL CHILD NUTRITION PROGRAMS:
UNDERSTANDING THE LINKAGES

An analysis of the dual impacts of food insecurity and obesity on low-income individuals, households, and communities, and the current and future positive role federal child nutrition programs can play in the prevention of these two public health problems.

Food Research and Action Center

October 2005

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Obesity, Food Insecurity and the Federal Child Nutrition Programs: Understanding the Linkages

Introduction

In the United States we find ourselves at a challenging crossroads in our efforts to improve the nation's nutrition and health. At the same time that we face an epidemic of obesity in the U.S., food insecurity continues to be a significant (and in recent years growing) public health problem as well.

Obesity, according to the most current National Health and Nutrition Examination Survey (NHANES)* data, affects 30 percent of adults, 16 percent of children 6 through 19 years, and 10 percent of children 2 to 5 years. Overweight affects another 35 percent of adults, 31 percent of children 6 through 19 years, and 22 percent of children 2 to 5 years. (Hedley et al., 2004) The period between 1960 and 1980 showed little change in rates of overweight and obesity for adults and children, but in the next 20 years these rates rose dramatically, for all genders and ages. (Crawford, 2005)

In general, food insecurity showed a gradual downtrend from 1995, when it was first measured nationally through the Bureau of Census Current Population Survey* (CPS), until 2000, when it began to move up again. Food insecurity climbed from a low of 10.1 percent of households in 1999, to 10.5 in 2000, 10.7 in 2001, 11.1 in 2002, 11.2 in 2003 and 11.9 in 2004. Particularly for children, large proportions of people live in food insecure households. In 2004, the 13.5 million households that were food insecure included 24.3 million adults (11.3 percent of all adults) and 13.9 million children (19 percent of all children), a total of 38.2 million individuals, or 13.2 percent of the total population. (Nord et al., 2005)

Food insecurity, by definition, is a condition related to lack of resources, i.e., the survey questions used to determine food insecurity in the annual CPS module all include words like "because there wasn't enough money for food. For example, CPS asks: "In the last 12 months, did you or other adults in the household ever cut the size of your meals or skip meals because there wasn't enough money for food?" Over one-third of households with incomes below the poverty line (36.8 percent) were food insecure, while 5.4 percent of households with incomes at or above 185 percent of poverty were food insecure. (Nord et al., 2005)

As in the case of food insecurity, overall rates of overweight and obesity are highest for low-income people, but the differences by income are much more modest than in the case of food insecurity. Moreover, a recent analysis of NHANES data over three decades shows that it is not the poor who have shown the largest increases in obesity. There also is a great deal of variation among subgroups in how income affects obesity rates. (Chang & Lauderdale, 2005) For example, adult men with incomes below the poverty level are slightly less likely than men in the highest income group to be overweight, although they are slightly more likely to be obese. Poor women, on the other hand, are much more likely to be overweight and obese than women with the highest incomes. Among children the differences are not clear cut and vary a great deal by age, gender and income. When disaggregated by race and ethnicity, in some cases low-income children are more likely to be overweight or obese, and in other instances less likely. (Crawford, 2005*)

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* NHANES is conducted on an annual basis under the auspices of the Centers of Disease Control, US Department of Health and Human Services. It is the most comprehensive nationally representative nutrition survey carried out in the United States. CPS is a nationally representative monthly survey conducted by the Bureau of Census in approximately 58,000 households throughout the U.S. Food security questions are asked once a year.

What has surprised many is that food insecurity and obesity can affect the same individuals and households, as well as communities. In fact, a number of studies have demonstrated a strong association between food insecurity and obesity among low-income women. (Olson, 1999; Frongillo et al., 1997; Townsend et al, 2001; Adams, et al., 2001); Crawford, et al., 2004)

There are serious consequences that grow out of both of these conditions. For poor people and communities, food insecurity and obesity, especially in the context of poverty, are a kind of negative "double whammy." Either of the problems alone is terribly damaging to poor people, and the solutions have to be synergistic, rather than work at cross purposes. This dual nutrition problem thus is an enormous challenge for policy-makers, communities, and practitioners. How can these two public health problems be dealt with simultaneously, in an effective and sensitive manner?

In order to tackle this challenging and important issue, it is essential to gain a deeper understanding of the current status and trends in obesity and food insecurity in the United States, and how they may especially affect the lives of low-income individuals.

What are obesity and overweight?

Whether an adult is obese, overweight, normal weight, or underweight is determined by calculating his or her BMI, or Body Mass Index. BMI is calculated by dividing the weight in pounds by the height in inches squared (i.e., multiplied by itself) and then multiplying the answer by 703. In mathematical form, it looks like this:
BMI = (weight in pounds/height in inches x height in inches) (703). If the final answer is between 25 and 29.9, the individual is classified as overweight, and if it is 30 or above, the person is obese.

For children from 2 to 19 years of age, the final answer (BMI) is compared to growth charts that show children's BMIs for different ages and genders. Where a child's BMI falls on the growth chart for his or her age and gender determines weight status. Using the terminology developed by the National Center for Health Statistics, if his or her BMI falls between the 85th and 95th percentiles on the appropriate age/gender chart, his or her weight status is "at risk of overweight" (equivalent in meaning to the word "overweight" in adults). If his or her BMI is at or above the 95th percentile for his or her age and gender, then the classification will be "overweight," equivalent to the word "obese" being applied to an adult. This is designed to avoid stigmatizing children, but also creates some confusion when writing about "obese" adults and "overweight" children. Since the Institute of Medicine's *Preventing Childhood Obesity: Health in the Balance*

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* This paper and several others on topics related to food insecurity and obesity are available on FRAC's website, www.frac.org, in *Proceedings of the Roundtable on Understanding the Paradox of Hunger and Obesity.*

(IOM, 2005), much of the non-academic literature, and media reporting classify children as overweight and obese, like adults, we will use those terms in the remainder of this paper.

Who is overweight and obese?

According to the most current NHANES data (1999-2002), 35 percent of adults were overweight and 30 percent were obese, meaning that almost two-thirds (65 percent) of the adult population is overweight or obese. Among children 6 through 19 years, 31 percent were overweight and 16 percent were obese, making almost half (47 percent) of school-age children overweight or obese. Among 2 to 5 year olds, 12 percent were overweight and 10 percent were obese. This amounts to one in five preschool children being overweight or obese. (Hedley et al., 2004)

Ethnic and racial disparities are apparent when obesity and overweight rates are examined further. The prevalence of adult overweight and obesity is higher among Hispanics and Blacks than among Whites. However, when rates are broken down by gender for each group, it becomes clear that it is the women's rates that are determining these differences. Men in each of the groups have very similar obesity rates - - White men at 28.2 percent, Black men at 27.9 percent, and Mexican American men at 27.3 percent. When women's rates are examined, there are disparities. White women have a 33.2 percent obesity rate, Black women a 49 percent rate, and Mexican American women 38.4 percent. (Hedley et al., 2004)

As with adults, national data show that the prevalence of obesity is higher among African American and Hispanic children than it is among white children. However, among children disparities in rates apply for both boys and girls. Obesity in White boys is 14.3 percent and in White girls is 12.9 percent; the rates for Black boys and girls are 17.9 percent and 23.2 percent, respectively; and for Mexican-American boys and girls, 25.5 percent and 18.5 percent. (Hedley et al., 2004) There are no national data for Native American children, but smaller studies show even higher rates for Native American boys and girls - - 32.6 percent and 31.7 percent. (Crawford, 2005)

As mentioned in the introduction, low income is associated with higher rates of overweight and obesity. However, the overall numbers hide differences by gender, age, and race and ethnicity that make the associations more complicated and difficult to understand and explain. For example, men with incomes below the poverty line are slightly less likely than men in the highest income group to be overweight, although they are slightly more likely to be obese. But the association with income among women is clear and quite strong - - women living below the poverty line are much more likely to be overweight and obese than women with the highest incomes. (Crawford, 2005)

Among children, the differences are not as clear cut. Among White boys and girls, as income increases the risk of obesity decreases, but among other racial and ethnic groups, higher income does not necessarily predict lower levels of obesity. For example, obesity is higher among Hispanic boys in middle and high-income families than in low-income families. Asian boys have lower rates of obesity at low and high income, compared to those with middle-level incomes. The rate of obesity among African-American boys varies very little by family income. The prevalence of obesity among African-American girls is lowest for those from middle income families and highest for girls from families with low and high incomes. Asian girls have lower obesity prevalence overall, while Hispanic girls at all incomes have high rates of obesity. (Crawford, 2005) These differences point out the need to evaluate carefully simple assumptions about obesity and the poor, and focus on better understanding of its causes and potential solutions.

The causes of obesity and overweight- - What do we know?

Until fairly recently, the primary and sometimes only cause of obesity in the minds of many people was lack of personal responsibility. It was the fault of the obese person, or, in the case of the child, the fault of the parents and the child. According to this belief, what was lacking was "will power" and, maybe, lack of information. The prescription for change was individual—nutrition education, improved parental responsibility, and increased strength of character.

While not losing sight of the important role of individual parental and child responsibility, researchers have identified a range of environmental, or external causes and changes in recent decades that have contributed to the obesity epidemic - - by contributing to increased food intake (and especially intake of less healthful foods) and to decreased physical activity.

Some of these causes are changes in American society that affect all of us—a more sedentary lifestyle that includes less walking, longer working hours, longer commutes, and less physical activity among children. Children have less physical education at school and face the temptations of vending machines and high-fat snack sales in schools at all hours. Entertainment, for both children and adults, as well as children's schooling and adults' work experience, tend to be more sedentary, with multi-channel televisions, computers and other engaging electronic gadgets. Many communities are laid out in ways that discourage physical activity, and parents are often fearful about children walking home from school or playing outside for safety reasons and because parents are not home after school. Large amounts of super-sized tempting high fat foods are readily accessible all around us—at every shopping mall, in many public buildings, and, it sometimes seems, on every street corner—and are advertised to both children and adults on television and in many other venues. (Samuels, 2003; Boyle et al., 2005)

Low-income families and neighborhoods face all of these challenges and more. Low-income neighborhoods lack full-service grocery stores, and those stores which are in the community are less likely to have healthful foods. Food choices often are limited to small neighborhood convenience stores, liquor stores or fast food outlets, where high-fat, high-calorie foods are more common, and fruits, vegetables, and non- and low-fat milk and low-fat snacks are not. The price of healthy foods is also a factor for many low-income households - - healthy foods are often significantly more expensive, when they are available. (Samuels, 2003; Drewnowski & Specter, 2004; Boyle et al., 2005; Neault et al., 2005)

Low-income communities often have few safe or attractive places to play or be physically active. Open space is at a minimum, and recreational facilities often are inadequate. Afterschool and summertime recreational activities and sports are typically less available to low-income children. High rates of crime or fear of crime limit the ability to play safely and be physically active outdoors. Less pleasant "street scenery" in low-income neighborhoods discourages recreational walking. (Samuels, 2003; Boyle et al., 2005)

School districts in low-income neighborhoods often are underfunded. As a result, even more than in other schools, physical education and sports may see cutbacks in order to focus resources on academic improvement. This means less physical activity during the school day. (Samuels, 2003; Boyle et al., 2005)

Underfunded schools in low-income neighborhoods also are likely to be more crowded, making it harder to accommodate comfortably all the children who want to eat school lunches and breakfasts. Overcrowded, aesthetically unpleasant cafeterias, especially those that have not been remodeled in recent years, can discourage participation in the nutrition programs. Lack of space for consuming meals can lead to long lines, insufficient time to eat, very early or late lunch hours, and overly noisy mealtimes.

Many school districts have entered into contracts with food and beverage companies for the sale of certain products in vending machines that end up bringing cash resources to the school at the expense of children's nutrition. Low-income schools may be under even greater pressure to do so. Schools may also choose for financial reasons to sell profitable items in cafeteria "a la carte" lunch lines (additional lines that sell individual foods, sometimes of questionable healthfulness, in competition with the school lunch program) from which students seldom choose good lunches. The foods on these a la carte lines, like the contents of school vending machines, are not controlled by strong nutritional standards. The combination of vending machines and a la carte lines full of items that are high in fat, salt and sugar may be too great a temptation for any age student. Low-income schools also may lack the equipment necessary to prepare any food items on site and lack the resources to purchase or prepare high quality frozen, packaged, or precooked meals.

Social and emotional factors may be potential causes of obesity among children. Several studies have shown an association between depression in children and the development of obesity. Moreover, some researchers are beginning to suggest that the brain's response to stress may lead to central fat deposition and insulin resistance in adults. Stress could also affect children in similar ways. (Institute of Medicine, 2005) Low-income families also may face the additional financial and emotional pressures of low-wage work, inadequate and long-distance transportation, poor housing, and neighborhood violence. (Samuels, 2003; Boyle et al., 2005)

Recent research is also pointing to causes of obesity in children that are related to their mothers' nutritional status. Maternal obesity is one of the strongest predictors of obesity in children (Olson, 2005), and low-income women are more likely to be overweight and obese. This may put poor children at increased risk of obesity as they age. Several studies also have found that socioeconomic disadvantages in early life are positively associated with increased obesity in young adulthood. Thus, poor children, even if normal in weight or underweight in childhood, can have an increased propensity to be obese as adults. (Olson, 2005)

In addition, recent research points to another consequence of food insecurity - - obesity. A number of studies have shown a strong association between food insecurity and obesity among low-income women. The reasons are unclear, but appear to be related to how they manage limited resources for food - - sacrificing, on a cyclical basis, the quality and quantity of the food they eat in order to protect their children. This "feast or famine" situation may expose women to an increased risk of obesity. (See "Food Insecurity and Obesity: The Linkages.")

Finally, many low-income people lack access to basic health care, or, if health care is available, it is lower quality. (Samuels,2003; Boyle et al., 2005) This translates into less effective preventive care and lack of diagnosis and treatment of emerging chronic health problems like obesity.

What are the consequences of obesity and overweight?

The high and increasing rates of obesity are extremely disturbing from personal health and public health standpoints. We know that obesity begins to have negative effects in childhood. Overweight children are stigmatized by their peers and sometimes even by parents and teachers, leading to low self-esteem, negative body image and depression. (Institute of Medicine, 2005) This can affect their ability to socialize well with others and to feel comfortable in a classroom setting. Children who are overweight or at risk of overweight are also at greater risk of developing type 2 diabetes, pulmonary complications such as asthma and sleep apnea (a breathing problem during sleep), and hypertension. (Crawford, 2005)

Hypertension and type 2 diabetes, once considered adult diseases, are now much more common among children and adolescents. These conditions, once triggered, can become lifetime problems that are difficult to manage and can be associated with a lower quality of life and premature mortality due to related medical problems and complications. The Centers for Disease Control and Prevention predicts that one in three children born in the United States in the year 2000 (and one half of Hispanic children and close to one half of Black children) will develop diabetes at some point in their lives. (Crawford, 2005)

Another serious problem that is a complication of childhood and adult obesity is the "metabolic syndrome" - - diagnosed when a person has at least three out of five metabolic abnormalities: glucose intolerance, abdominal obesity, hypertriglyceridemia, low high-density lipoprotein (HDL) cholesterol, and high blood pressure. This syndrome is now present in one-quarter of adults in the U.S., and in nearly 30 percent of the children and youth who are obese. Among children who are obese, the metabolic syndrome appears to contribute to the development of atherosclerosis. (Institute of Medicine, 2005)

Even if these conditions do not show up in childhood, obese children are more likely to become obese adults, increasing the chances that they will suffer from these conditions as adults, along with cardiovascular disease, some cancers, and arthritis, among others. (Surgeon General, 2001)

What are hunger and food insecurity?

At the same time that overweight and obesity are hurting millions of poor as well as other Americans, food insecurity and hunger also damage the quality of lives and health. It is sometimes difficult for people to believe that hunger exists in the United States in the twenty-first century. Food or images of food are everywhere we look, and obesity is the major nutrition concern being discussed. Our country is extraordinarily wealthy. Yet hunger persists.

While hunger and food insecurity still are far too widespread, they have been reduced in recent decades by economic growth and a growing federal commitment to nutrition. The nation has slowly built a nutrition program safety net, starting in the 1930's with the commodity program for school lunches. Much of the growth of this safety net occurred in the 1970's in response to media and public health community attention to nutrition problems in the poorest areas of the U.S.— in Appalachia, the Southeast and the Southwest — where physicians and emerging political leaders in the late 1960s and early 1970s saw nutrition problems they would have expected to find only in developing nations. School Lunch and Breakfast Programs became more widespread and more available to poor children, Head Start Programs with a nutritional component began and expanded in many poor communities, and the Food Stamp and WIC Programs began. After these developments, a group of physicians sent by the Field Foundation in 1977 to examine the impact of these programs reported to Congress that there were "far fewer grossly malnourished people in this country," but that "malnutrition has become a subtler problem." (Kotz, 1979) The 1970s had dramatically reduced the worst incidence of hunger in the U.S.

The early 1980's saw both a recession and cutbacks in public assistance programs. The relatively small numbers of food pantries and soup kitchens at that time experienced precipitous increases in demand for emergency food, with increasing numbers of women and families with children showing up to obtain help. Community-based organizations, local government officials, and academic researchers working in communities struggled to find credible ways to document the growing problem they were seeing, so that local jurisdictions could be motivated to respond. (Nestle & Guttmacher, 1992)

In response, the Reagan Administration created a President's Task Force on Food Assistance, which reported that, "While we found evidence of hunger ... we have also found that it is at present impossible to estimate the extent of hunger. We cannot report on any indicator that will tell us by how much hunger has gone up in recent years." (Report of the President's Task Force on Food Assistance, 1984)

The kind of hunger that these groups and individuals were observing was not as often the nutritional deficiency diseases physicians saw in the 1960's, but rather a chronic, cyclical, poverty-related inadequacy in household food supplies. In response to requests from local and state anti-hunger organizations across the country, the Food Research and Action Center (FRAC) took on the challenge of developing and implementing the first national survey of this kind of hunger among families with at least one child below the age of 12.

FRAC researchers and their technical advisory committee developed a series of eight questions to measure hunger, which were part of a longer survey that asked questions about spending on food, employment, children's health, participation in federal nutrition programs, and other relevant issues. The project was called the Community Childhood Hunger Identification Project (CCHIP). The results of the surveys, released in 1991 and 1995, raised public awareness and concern about hunger and contributed to positive policies in nutrition program funding and operations at the local, state and national levels. The survey also was later used to develop the questions for the U.S. government's survey of hunger and food insecurity. (Food Research and Action Center, 1991 & 1995).

The words and concepts we use to describe the hunger we see today come from the work of the Life Sciences Research Office of the Federation of American Societies for Experimental Biology (LSRO/FASEB). (Anderson, 1990) In response to a clamor for definitions of the food problems people were seeing around them, LSRO researchers began by defining the positive state of **food security**: "Access by all people at all times to enough food for an active, healthy life [which] includes at a minimum: a) the ready availability of nutritionally adequate and safe foods; and b) the assured ability to acquire acceptable foods in socially acceptable ways (e.g., without resorting to emergency food supplies, scavenging, stealing, and other coping strategies)." In order to incorporate the most common kind of hunger found in the United States, they used the word **food insecurity** to mean "the availability of nutritionally adequate and safe foods or the ability to acquire acceptable foods in socially acceptable ways is limited or uncertain." They defined the word **hunger** as "the uneasy or painful sensation caused by lack of food."

In 1990 Congress passed comprehensive nutrition monitoring legislation which, inter alia, required the development of a measure of food insufficiency as part of the national nutrition monitoring system. This food security measurement was developed by the Bureau of Census and the Departments of Agriculture and Health and Human Services in the form of a module of questions to be included in the Current Population Survey (CPS). This module was first included in the CPS in 1995, and has been a part of it every year since.

The module contains 18 questions used to develop a scale for determining the level of food security/insecurity. Households are classified into three categories. **Food secure** households show no or minimal evidence of food insecurity, although they may express concerns about the availability of food due to lack of financial resources. **Food insecure households without hunger** have adults skipping meals or cutting the size of meals and making other adjustments, including reducing the quality of diets for themselves and their children. **Food insecure households with hunger** are households in which food intake for both adults and children in the household is reduced to the extent that they are likely to have repeatedly experienced the physical sensation of hunger. (Hamilton et al., 1995)

This measure tends to be conservative - - households have to be suffering to quite an extent to be classified as food insecure or hungry. Also, many adults are reluctant to state that they don't have enough money to buy food, and are especially reluctant to admit to interviewers that their children are hungry.

This measure is widely respected and used by diverse audiences to characterize and quantify the current food sufficiency problems in the U.S. In fact, reducing food insecurity by 6 percentage points (a 50 percent decrease), based on the annual CPS survey results, is one of the "national health objectives designed to identify the most significant preventable threats to health" in *Healthy People 2010*. *Healthy People 2010*, a comprehensive, nationwide health promotion and disease prevention agenda that contains 467 objectives, is the federal government's roadmap for improving health in the U.S. during the first decade of the 21st century. (U.S. Department of Health and Human Services, 2000)

Who is affected by food insecurity and hunger?

Low-income (due to low wage jobs, involuntary part-time or part-year work, job loss, unemployment, illness, inadequate public income supports, etc.) often leaves households with insufficient money or other resources to obtain enough food. Food insecurity and, eventually, outright hunger result when people, due to economic constraints, lack access to enough food to fully meet basic needs at all times. (Hamilton et al., 1995)

In the U.S., according to the latest data available (2004), 11.9 percent of households (13.5 million households) were food insecure (with or without hunger)*, and 3.9 percent (4.4 million) were food insecure with hunger. Food insecure households included 24.3 million adults and 13.9 million children, a total of 38.2 million individuals. Households with hunger, a segment of all food insecure households, included 7.4 million adults and 3.3 million children. (Nord et al., 2005) In general food insecurity showed a consistent downward trend from 1995 to 1999, but began to rise again by 2000, and has risen each year since.

Rates of food insecurity and hunger are higher for households below the poverty line, (36.8 percent and 13.6 percent); households with children which are headed by a single woman (33 percent and 9.2 percent); Black households (23.7 percent and 8.1 percent); and Hispanic households (21.7 percent and 5.9 percent). Households with children are twice as likely as households without children to be food insecure (17.6 percent vs. 8.9 percent). Food insecurity is more prevalent in central cities (15.4 percent) than in other areas, and in the South and West versus the Northeast and Midwest. (Nord et al., 2005)

Food insecure households spend less money on food than food secure households. According to 2004 data, the typical U.S. household spends $40 per person each week for food, which is 25 percent more than the cost of the Thrifty Food Plan (TFP). The Thrifty Food Plan (TFP) is a market basket of particular foods and quantities of foods upon which the food stamp allotment is based. It was originally developed during the Depression to meet short-term emergency needs. Food secure households spend 28 percent more than the TFP, whereas food insecure households spend 2 percent less than the TFP. (Nord et al., 2005)

What are the consequences of hunger and food insecurity?

Research shows that households which fear running out of food, or cannot buy enough to meet their needs, manage their food insufficiency problems in such a way as to stave off hunger, especially for their children, as long as possible. First they reduce the quality of their diets, and eventually they reduce the quantity of the food they consume, adults making the adjustments in their diets first before they reduce the quality and quantity of their children's food intake. (Hamilton et al., 1995) As a result, children typically are the last ones in the household to experience hunger.

Over the last decade, researchers have been examining the impact of food insecurity on other aspects of quality of life, including food habits, dietary intake, child and adult health, obesity, mental health, pregnancy, and educational achievement. They are finding that even children who are not "hungry" are affected negatively by living in a food insecure household. Parents are reducing the quality of the food their family eats, or feeding their children unbalanced diets, or skipping meals so their children can eat. When parents do not know where the next meal will come from, these stresses and changes can affect the behavior and mental health of children. Researchers are finding that when children live in food insecure households, their health status can be impaired, making them less able to resist illness and more likely to become sick or hospitalized. Iron deficiency anemia among very young children also has been associated with household food insecurity. Children from food insecure households have problems with learning, resulting in lower grades and test scores. They also are more likely to be anxious and irritable in the classroom, and more likely to be tardy, or absent from school. Adolescents from food insecure households appear to be more likely to have psychological problems. (Center on Hunger and Poverty, 2002)

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* In this paper, unless otherwise specified, "food insecure" is used to mean with or without hunger.

Food insecurity and obesity: Linkages

Recent research has uncovered another potential consequence of food insecurity - - obesity. It is at first blush counterintuitive that hunger and food insecurity can co-exist with obesity in the same individual. However, a number of recent studies have shown strong associations between food insecurity and obesity among women. One study looked at a random sample of women in a rural county in New York State and found that the BMI for women in food insecure households was significantly higher than that of women in food secure households, controlling for height, income, education, single parent status and employment. (Olson, 1999) Another study analyzed data on women's weight and food security status from USDA's nationally representative 1994-1996 Continuing Survey of Food Intakes by Individuals, and found that an increased prevalence of overweight was associated with food insecurity. (Townsend et al., 2001)

Analysis of NHANES data showed similar results - - the prevalence of overweight was significantly higher in women from food insufficient households than in food sufficient households. (Basiotis & Lino, 2003) An examination of data collected in the 1998-1999 California Women's Health Study found that food insecurity without hunger was associated with an increased obesity rate in all women, and that food insecurity with hunger was associated with increased obesity in Asians, Blacks, and Hispanics, but not among Whites. (Adams et al., 2001) In addition, another study in California, among Latina mothers of preschoolers, demonstrated an association between food insecurity with hunger and obesity. (Crawford et al., 2004)

The reasons for these associations between food insecurity and obesity among women (there is little evidence of this association among men or children) are unclear. Researchers have suggested a number of mechanisms, most having to do with how low-income mothers manage limited resources for food - - sacrificing their own nutrition in order to protect their children from hunger. Researchers believe that something about inadequate resources and putting the children's needs first can create a chronic "feast or famine" situation which appears to contribute to maternal obesity. Research also shows that food deprivation can cause a preoccupation with food that has the potential to cause obesity. Some researchers have found an association between food insecurity and a binge-like pattern of eating. Thus, women who are food insecure on a regular basis may overeat at those times during which they have adequate amounts of food. (Olson, 2005)

Some also have suggested that the kinds of food consumed by food insecure women may make a difference. Because refined grains, sugar, and fat cost less per calorie than fruits and vegetables, women lacking adequate resources may be purchasing the less expensive energy-dense foods in order to stave off hunger, or they may be avoiding fruits and vegetables because of their increased cost per calorie. (Drewnowski & Specter, 2004)

Some suggest that food insecurity and obesity appear to be associated with each other because they both may result from poverty. In particular, poverty in childhood may play this role. Two recent studies, from New Zealand and Britain, demonstrate that poverty in childhood is associated with obesity in young adulthood. Hunger and food insecurity related to that early poverty may contribute to poverty's impact on adult obesity. (Olson, 2005)

In addition, food insecurity may be a stressor that results in a stress response that leads to disordered eating, reduced physical activity, and depression, all of which may be related to weight gain (Jones, 2005), or food insecurity and/or poverty may cause a stress response that is hormonal, causing central patterning of fat deposition. (Olson, 2005)

There is a limited amount of research that focuses on the relationship between obesity and food insecurity among children, and it does not paint a consistent or clear picture. Two recent studies, using nationally representative data from different data sets, have found positive relationships between food insecurity and obesity among some groups of children studied, but not among all groups. Another study, using a third nationally representative data set, did not find such a relationship. A fourth study of a sample of preschool Mexican-American children in California found a trend toward such a relationship, but it was not statistically significant. The research in this area is just beginning, and no clear pattern has emerged to explain which children may be affected by this relationship and why. (Alaimo et al., 2005; Casey et al., 2001; Jones et al., 2003; Kaiser et al., 2002; Frongillo et al., 2003)

The effects of the coping strategies food insecure households employ to stave off hunger and make it through each month are likely to affect adults more often, and more profoundly, than they do children. However, they will affect children - - directly in food intake, indirectly in learned food patterns, and potentially indirectly in ways not yet understood - - with lifelong consequences. The first mention in the scientific literature that obesity and food insufficiency might be causally related was a case reported in the journal *Pediatrics* by Dietz in 1995, in which he described a 7-year-old girl in a weight control program who weighed 180 pounds. Her mother was a low-income single parent, and the family was short of food on a regular basis. The first bill that was paid each month was rent, and the family had no resources by the middle of the month. To cope with this situation, the mother fixed large meals that were inexpensive but high in calories. Dietz suggests that, if obesity is linked to hunger and food insecurity, as it appeared to be in this child's case, the solution to obesity in impoverished populations may be an increased food supply "to achieve a more uniform pattern of food consumption." (Dietz, 1995; U.S. Department of Agriculture & U.S. Department of Health and Human Services, 1994) More recently, a researcher who has focused on low-income Mexican-American children has suggested that, among the population she has studied, food insufficiency and anxiety about past food supply may lead to less optimal parenting around food choices, and less desirable food habits in children, even when food is more available. (Kaiser et al., 2002)

Child nutrition programs, food insecurity and obesity: What role can the programs play?

Child Nutrition Programs

There are five basic federally-funded child nutrition programs that provide meals, snacks, or individual foods to children. Four of them provide help at sites where children are likely to be and where food service is essential; the fifth, WIC, helps children at home. The five are the School Breakfast and National School Lunch Program, the Summer Food Service Program, the Child and Adult Care Food Program and the WIC* Program. (Food stamps, another critical program, is not usually considered a "child nutrition program" and is beyond the scope of this paper. However, half (51 percent) of food stamp beneficiaries are children, and its role also is critical.)

From the very beginning of the child nutrition programs, several important principles have placed these programs in a strong position to play a crucial role in obesity prevention. First of all, except for WIC, all of these programs are entitlement programs. "Entitlement" means that, within the parameters set by the law, all eligible schools or sponsors which wish to operate these programs may, and all eligible children under their auspices may participate in the nutrition programs they operate. There are no specific funding ceilings for these programs. This entitlement status means that these programs can grow with need - - i.e., if there is an economic recession or a national disaster in a community, and more children become needy, or if outreach and improved practices bring in more local sponsors or schools or children, these programs are financially ready to expand to accommodate their basic food needs.

Another important principle that has evolved is uniform national eligibility requirements based on income. All children can participate in School Breakfast or Lunch, for example (although some children pay some of the cost depending on income), and income eligibility levels are universal within the 48 contiguous United States - - i.e., whether a child lives in Oregon or Georgia, he or she must fit within the same income standards to receive a free or reduce price meal. (Alaska and Hawaii have higher maximum income limits.)

The third and fourth principles pertain to nutrition. The foods, meals and snacks provided by these programs must meet specific nutrition standards developed by the U.S. Department of Agriculture based on scientific research. However, the fourth principle - - decentralization and flexibility - - allows schools to serve a variety of foods within these guidelines that reflect their community's food habits, products, and cuisine.

These principles mean that child nutrition programs can and should model the best nutrition for children, that these meals and foods can reach children who need them everywhere in this country, and that these programs can play a crucial role in contributing to food security among low-income families. By increasing access to these programs so that even more children are reached, and by working to further improve the nutritional quality and appeal of program benefits, the full potential of these principles can be reached.

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* Officially, WIC is called the Special Supplemental Food Program for Women, Infants and Children.

School Lunch and Breakfast

The National School Lunch Program is operated by approximately 95 percent of public schools, and 28 million children receive a federally subsidized school lunch every day, over half of whom (16.5 million) are from low-income families (with family incomes below 185 percent of the federal poverty level). Children receive these meals for free if their family income is at or below 130 percent of the federal poverty level, and they pay up to 40 cents for a "reduced price" lunch if family income is higher than 130 percent of the poverty level, but no more than 185 percent. If household incomes are higher than 185 percent, children pay close to the full cost of the meal, which varies from school to school, and the federal government pays a small amount.

Schools receive cash reimbursements for each meal served, the amount depending on whether the meal was free, reduced price, or what is referred to as a "paid" meal. In addition, schools receive commodity foods from the government, to some extent based on their choices among the surplus foods available at the time. The commodities are a significant contributor to the school lunches that are served each day. Finally, some states supplement federal reimbursements with state funds, which can make an enormous difference to schools' nutrition programs.

The Lunch Program has been the flagship of child nutrition, serving as a model for program operations. This is especially true in the area of nutrition standards. Currently, lunches must provide one-third of the Recommended Dietary Allowances for key nutrients. In addition, relatively recent additional standards that comply with the 2000 Dietary Guidelines for Americans require no more than 30 percent of calories from fat and less than 10 percent of calories from saturated fat. Lunches also are supposed to have reduced sodium and cholesterol and increased fiber.

The actual lunches served to children can be developed by a school or school district using: special computer programs that develop lunch menus while ensuring that nutritional standards are met; a food-based meal pattern, i.e., a certain amount of milk, a certain amount of fruits and vegetables, etc.; or any other method that ensures that all nutrition standards and meal pattern rules are met. The majority of schools use a food-based pattern, but the number of schools turning to computer-based menus is increasing over time.

The flexibility provided to schools allows many creative responses to student and community preferences. Vegetarian options are possible, cuisines from across the globe fit in, and popular meal delivery options, e.g., salad bars, soup bars, taco bars, and grab-and-go bag meals, are all possible.

Nevertheless, the most recent review by the U.S. Department of Agriculture on how well schools are doing (in 2001) in meeting nutritional standards regarding fat content shows progress, but much room for improvement. On average, elementary schools are serving lunches with 33.1 percent of their calories from fat, and 11.9 percent from saturated fat, and secondary schools, on average, are at 34.5 percent and 12.1 percent respectively. In other words, the average school lunch exceeds the guidelines (30 percent and 10 percent, respectively.) Overall, only 19 percent of schools are at no more than 30 percent calories from fat, although 39 percent are between 30.1 and 34 percent.

While there is an urgent need to improve school meals, it is also true that they already improve students' nutrition in important ways. Because there are nutrition standards governing what is served in the lunch program, it is not surprising that participants consume more milk and vegetables at lunch and fewer sweets and snack foods than non-participants. Also, participants consume more grain products at lunch than non-participants. (Fox et al., 2004)

The positive impacts of the nutrition standards, along with the large numbers of current and potential participants in the Lunch Program, highlight the possibilities for enlisting the lunch program as an even more effective tool for obesity prevention - - both in terms of the food served and the nutrition lessons that can be taught. This is particularly important to recognize in light of recent research that demonstrates the difficulties many low-income people face when they try to purchase the foods that health professionals prescribe as an obesity-fighting, heart-healthy diet. They have to spend a great deal more than food stamps and/or their budgets allow, and many cannot afford to do this without jeopardizing other family financial needs. (Neault et al., 2005; American Heart Association, 2004) The child nutrition programs can play an important role in providing these foods to children and freeing up resources for families to purchase more healthful foods for meals not covered in school.

The School Breakfast Program is operated in more than 78,000 schools, and reaches 8.7 million children every day, 82 percent of whom are from low-income (below 185 percent of poverty) families. The program reaches about 43 percent of low-income children who receive free or reduced price school lunches. Schools are reimbursed by the federal government based on whether the meals are free, reduced-price (up to 30 cents charge to the student) or "paid" (students pay most of the cost). There are no federal commodities in breakfast, but lower-income ("severe need") schools get extra reimbursements. Some states also have added an additional state reimbursement for each breakfast served. Breakfasts, like lunches, are based on nutrition standards - - they must provide children with one fourth of their Recommended Dietary Allowances, and have the same limitations on calories from fat and saturated fat as lunches do.

School breakfasts do better than lunches at meeting the guidelines for fat content - - on average they meet both the fat calories and saturated fat calories standards, coming in at less than 30 percent for calories from fat. Seventy-one percent of all schools serving breakfast average no more than 30 percent fat, and 52 percent average less than 10 percent saturated fat, with 27 percent between 10.1 and 12 percent. Overall, the fat content of school lunch and breakfast greatly improved from when it was measured in 1991-92. (Fox et al., 2001) However, there is still a long way to go to lower the fat content of school lunches.

School Breakfast, like School Lunch, can play an important role in obesity prevention. Children and adolescents who are breakfast eaters (whether school breakfast or breakfast elsewhere) are less likely to be overweight. (Rampersaud et al., 2005; Afenito et al., 2005) Skipping breakfast is more prevalent among girls, low-income children, older children and adolescents, and among some Black and Hispanic adolescents. (Rampersaud et al., 2005) Participation in the School Breakfast Program reduces breakfast skipping. School Breakfast participation also increases scores on the Healthy Eating Index, a measure of overall dietary quality, and reduces the percentage of calories from fat in children's diets. (Basiotis & Lino, 1999)

In addition, the availability of the School Breakfast Program affects the quality of the diets of other members of the family. The School Breakfast Program is associated with better scores on the Healthy Eating Index and fewer calories from fat among preschool children and adults in the families of school-age children. (Bhattacharya, 2004)

Summer Food Service Program

When school lets out, millions of low-income children lose access to the nutritious school breakfasts, lunches, and afterschool snacks they receive during the regular school year, as well as the daily physical activity programs in schools or afterschool programs. The Summer Food Service Program (SFSP) and the National School Lunch Program (NSLP) both can fill this gap by providing nutritious summer snacks and meals to children up to age 18, particularly in schools and programs in low-income areas.

Like all the other child nutrition programs, these snacks and meals must meet specific nutrition standards. In addition, research has shown that 93 percent of sites with the Summer Food Service Program provide activities as well. (Gordon et al., 2003) Thus, the Summer Food Service Program (and the National School Lunch Program during the summer months) contribute to children's healthy growth and development, substituting recreational programming for sedentary television program watching, and fruits and milk for chips and sugary fruit drinks.

Local government agencies, school districts, nonprofits (including recreation centers, migrant centers, YMCAs and YWCAs, Boys and Girls Clubs, and faith-based charities) and summer camps are all places that can sponsor this summer nutrition program. Unfortunately, out of 15 million low-income children who depend on free or low cost meals during the school year, only about 3 million are receiving summer meals through NSLP or SFSP. Thus, the full nutrition and anti-obesity potential of these programs is not being achieved in many low-income communities across the country.

Afterschool Snacks and Meals

Afterschool snacks and suppers also are offered through the federal child nutrition programs. Afterschool programs have become important places for children to receive nutritious snacks, and often suppers, when their parents are working long hours, as well as providing children an opportunity to be physically active.

Schools and community-based organizations can be reimbursed for providing these snacks and suppers through the National School Lunch Program or the Child and Adult Care Food Program. The snacks and meals must meet specific nutrition requirements, and are comprised of milk, fruits and vegetables, grains, and meats or "meat alternates" (i.e., other protein sources). The kinds of foods offered and the reasonable portion sizes can be models for good nutrition, and provide alternatives to less healthful items available to many children. In addition, meals and snacks in the afterschool programs often draw children to the positive activities and safe environments offered by the programs.

These nutrition programs also act as a dependable base of funding for afterschool programs and provide financial support for food costs so that their limited resources can be spent on other aspects of afterschool care. In order for an afterschool program to be eligible for federal funds for snacks and meals, it must provide educational or enrichment activities in a regularly scheduled, structured and supervised setting. This can include arts and crafts, athletic activities that do not limit participation to certain children, mentoring, tutoring, or homework clubs. Unfortunately, many afterschool programs are unaware of this nutrition program or do not know how to apply, leaving children less well-nourished and activity programs underfunded.*

Child and Adult Care Food Program for Preschoolers

Along with providing nutrition to children in afterschool programs, the Child and Adult Care Food Program (CACFP) also provides nutritious meals and snacks to close to three million young children in family child care homes, child care centers and Head Start programs. Just as in all the other child nutrition programs, these snacks and meals must meet nutrition standards.

Studies show that children in CACFP receive meals that are nutritionally superior to those served to children in child care settings without the Child and Adult Care Food Program. (Bruening et al., 1999; U.S. Department of Agriculture, 1983) Thus, CACFP can help start good nutrition habits early in life. In addition, CACFP provides opportunities for the training of providers in child development, nutrition education, food preparation, and the importance of encouraging physical activity in children.

WIC

The Special Supplemental Food Program for Women, Infants and Children (WIC), which typically is operated at the local level through the public health department, is a preventive nutrition program that provides nutritious foods, nutrition education and referrals and access to health care to low-income pregnant women, new mothers, and infants and children at nutritional risk. WIC enhances the nutritional quality of the diet of participants through its prescription "food package," a specific set of important foods which includes milk, cheese, juice, eggs, iron-fortified cereal, infant formula, and beans. It is likely that the WIC food package will be revised in the coming year, and will include fruits and vegetables as a result of that revision.

Participants receive nutrition education, breast-feeding instruction, and nutrition counseling at WIC clinics, all of which can provide an important foundation for good nutrition and healthy physical activity habits among young mothers and their children. WIC clinics are at county health departments, hospitals, mobile clinics, community centers, schools, public housing sites, migrant health centers and camps, and Indian health service facilities. Screening and referrals to health care and welfare and social services can lead mothers and children to preventive health services and programs that, along with the food and nutrition services WIC provides, can provide their families with increased food security, more nutritious food, good nutrition and health advice, and increased economic security. This combination of services and programs can help low-income mothers and their families avoid the difficulties brought on by the development of obesity. Researchers at the Institute for Policy Research, for example, report that WIC participation prevents overweight in young children. (Bitler & Currie, 2004)

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* For more details on individual site eligibility and how to determine the rates that will be paid for children's snacks and suppers (i.e., in qualifying low-income areas all children can receive free snacks and suppers), see FRAC's guide to afterschool snacks, Nourish Their Bodies, Feed Their Minds: Funding Opportunities and Nutrition Resources for Afterschool Programs, at: http://www.frac.org/Afterschool_Guide.pdf.

The unique role nutrition programs play in obesity prevention

As discussed earlier, researchers are beginning to demonstrate that the coexistence of obesity and food insecurity in low-income households and individuals likely is related to their inability to purchase sufficient nutrient-dense foods on a consistent basis and the behavioral impacts of some household members regularly not having enough to eat. The prevention of obesity and food insecurity - - each a public health problem that is harmful to the health and quality of life for low-income families - - requires regular access to nutritionally adequate foods.

One key way to gain that access for more families is to take full advantage of the child nutrition programs. These programs play a dual role of fighting hunger and food insecurity and providing nutritious foods on a regular basis. For example, the child nutrition programs provide more than half of the nutrition a school-aged child receives each week day if s/he participates in both breakfast and lunch, and this food must meet nutrition standards. In afterschool and summer programs, the added benefit is that food attracts the children to programs that offer them opportunities for physical activity.

A recent expert panel appointed by the U.S. Department of Agriculture reviewed the current scientific literature and found no evidence of a relationship between participation in the nutrition programs and increased obesity. (Linz et al., 2005) Similarly, a recently published analysis of data from the nationally representative 1997 Panel Study of Income Dynamics Child Development supplement showed no evidence that the Food Stamp Program, National School Lunch Program, or School Breakfast Program contributes to overweight among poor children. (Hofferth & Curtin, 2005) In fact, emerging research is showing that participation in nutrition programs has the potential of protecting children from excess weight gain. An analysis of nationally representative survey data shows that school-age food insecure girls are less likely to be overweight or at risk of overweight if they participate in the School Breakfast Program, School Lunch Program or Food Stamp Program or any combination of these programs. (Jones et al., 2003) Another study showed that WIC participation prevents overweight in young children. (Bitler & Currie, 2004) Increasing access to the nutrition programs is essential.

There are still many children who are not receiving the benefits of these programs. There are numerous reasons for this, including: lack of availability of programs in certain schools or geographic areas; difficulty in accessing programs even when they are available; lack of knowledge or misconceptions about the programs or who is eligible for them; the competition of unhealthy food and beverage offerings in vending machines and a la carte lines in schools; lack of universal school breakfast programs (i.e., school breakfast without a charge, for all children in school); inability to understand application forms due to literacy or language problems; and, in some cases, perceived stigma associated with participation in the nutrition programs. Barriers to participation must be overcome to ensure that all children and especially low-income children can take full advantage of the nutritious meals and snacks offered by these programs. If seen and utilized as important allies in the battles against obesity and food insecurity, the child nutrition programs can help lead many low-income households onto a healthier path. (See FRAC's website, www.frac.org for more information on the federal nutrition programs and how to increase children's access.)

In addition to increasing access to the child nutrition programs, it is important to examine how the programs themselves can be further improved and how the environment in which the meals and snacks are served can foster good nutrition and increased physical activity. These two sets of actions can lead to the full development of the potential that nutrition programs offer in the battle to prevent obesity. The remainder of this paper addresses this potential.

New policy approaches: Improving the ways child nutrition programs combat obesity, improve diet, and foster physical activity

One of the key recommendations of the Institute of Medicine's ground-breaking and comprehensive study of what should be done in the U.S. to prevent childhood obesity (Institute of Medicine, 2005) is: "Schools should provide a consistent environment that is conducive to healthful eating behaviors and regular physical activity." To implement this recommendation, they suggest that local and state authorities and the U.S. Department of Agriculture should: implement nutrition standards for competitive foods and beverages sold or served in schools; ensure that school meals meet the Dietary Guidelines for Americans; and implement pilot programs to increase school meal funding in schools with a large percentage of children at risk of obesity.

The IOM report also suggests that state and local education authorities and schools should ensure, among other things, that: children and youth participate in 30 minutes of physical activity every school day; opportunities for physical activity be expanded (through physical education classes, traditional sports programs, afterschool use of school facilities, use of schools as community centers, and walking and biking-to school programs); and health curricula devote adequate attention to nutrition, physical activity, and reducing sedentary behaviors.

Ensuing sections of this paper give an overview of strategies to achieve these goals through the federal child nutrition programs.

Local wellness policies

Almost all of these goals can be advanced at the local level by the development and implementation of school district wellness policies, which are required to be in place in every school district participating in federal nutrition programs by the beginning of the 2006-2007 school year. In the Child Nutrition and WIC Reauthorization Act of 2004, Congress provided that the local policy must include goals for "nutrition education, physical activity, and other school-based activities that are designed to promote school wellness." The local wellness policy also must include nutrition guidelines "for all foods available on each school campus…during the school day" in order to promote student health and reduce childhood obesity. The policy development process must involve parents, students, representatives of the school food authority, the school board, school administrators, and the public.

Low-resource schools or schools with many low-income children may face special challenges in the development and implementation of local wellness policies because of underfunding and more pressing fundamental priorities related to achievement test scores, meeting state and federal education standards and working within limited budgets. To ensure that these schools see the wellness policy as a key priority, the connection between the optimum nutritional and physical health of students and the educational goals of school officials has to be effectively made. The case must be made in a compelling way, as many low-income schools face ongoing fiscal constraints, high staff turnover, low academic achievement, and a frequent lack of parental and community involvement. It is only natural that these very real problems could impede the effectiveness of a local wellness policy in both its development and implementation. At the same time, it is the low income students in these schools that could benefit the most from a comprehensive wellness policy. (FRAC has developed a guide, "Developing a Local Wellness Policy: A Resource for Schools Serving Low-Income Communities," to assist communities in this process. See FRAC's website, www.frac.org for more information.)

School officials need to be reminded that, while the obesity epidemic is being felt in all communities, the environment in low income neighborhoods can exacerbate this problem. As mentioned earlier in this paper, many ethnic minority and lower income communities lack access to affordable and high quality healthy foods, such as whole grains, low fat dairy products and lean meats, and a variety of fresh fruits and vegetables, because there aren't many supermarkets in these neighborhoods and because healthier foods tend to be less affordable. In addition, low-income children and adults have fewer opportunities to be physically active due to neighborhood characteristics and limited financial resources. Thus, schools in low-income neighborhoods can play a uniquely central role in children's health by providing a source of healthy and nutritious food and opportunities for physical activity.

Part of the compelling case for addressing nutrition issues in schools is the direct cost to a low-income school district of not doing so. Though not often discussed, there are enormous costs to local districts when children are undernourished and consume diets and live sedentary lives that lead to obesity. A great deal of literature describes the negative cognitive impacts of undernutrition, including inability to concentrate in class, lower achievement test scores, and poor grades. (Alaimo et al., 2001b; Murphy et al., 1998; Center on Hunger, Poverty and Nutrition Policy, 1995) The scientific literature also demonstrates a link between physical activity and increased cognitive function and academic performance. (Action for Healthy Kids, 2004) In addition, being undernourished or overweight may increase school absences - - because of related health problems - - and absenteeism is directly related to academic performance. Increased absenteeism also translates into reduced state funding for the affected schools. (Action for Healthy Kids, 2004)

Poor nutrition, physical inactivity and overweight also can increase schools' costs if special programs must be designed for children who suffer academically or behaviorally because of these conditions. In addition, the physical and emotional problems that poor nutrition and physical inactivity cause place an increased burden on teachers and other school staff who must provide students affected by these problems with additional services. (Action for Healthy Kids, 2004)

Changing competitive foods

One of the key aspects of local wellness policies is the development of standards for "competitive foods." "Competitive foods" is a term used to refer to foods sold in the schools that are not part of the federally funded (and regulated) nutrition programs but rather "compete" with the School Breakfast and Lunch Programs. Competitive foods include those sold in "a la carte lines" in the cafeteria, snack bars, vending machines and student stores.

Currently, the only federal restriction on the sale of competitive foods applies to so-called "foods of minimal nutritional value" - - foods containing less than five percent of the Reference Daily Intakes for all of several key nutrients, which includes such foods as carbonated beverages (i.e., soft drinks), water ices, chewing gum, hard candy, licorice, and candy coated popcorn. Moreover, this restriction against sale applies only during school lunch and breakfast periods and only in the school food service area. In other words, a vending machine serving sodas can sit just outside the school cafeteria, and need only be shut off during meal periods, or can be left on elsewhere in the school.

Research shows that access to competitive foods in school reduces the consumption of school meals (the only food programs in schools that must meet nutrition standards) and the quality of students' diets. (Cullen & Zakeri, 2004; Templeton et al., 2005) In addition, the presence of competitive foods may lead to increased stigma for children who eat free and reduced price meals and who may not be able to afford the a la carte items. Alternatively, the competitive foods lure kids to spend money their families can ill afford on vending machines and a la carte lines. Finally, the sale of less healthy competitive food sends students a very mixed message about nutrition from the central institution in their lives - - selling one thing in the cafeteria or outside the gym or the auditorium, and saying something very different in the classroom about what should make up a healthy person's diet.

In spite of all the reasons why competitive foods don't make sense for low-income students, or any students, most schools still sell them. According to a study by the Centers for Disease Control released in 2000, 80 percent of American school districts sold competitive foods, including 98 percent of high schools, 74 percent of middle schools and 43 percent of elementary schools. (Action for Healthy Kids, 2004) A 2003-2004 study by the Government Accountability Office (U.S. Government Accountability Office, 2005) shows that this situation has not changed appreciably.

One reason schools sell competitive foods is the resources these sales bring. The revenue often is used for computers, sports equipment, the funding of school programs or activities, field trips, or other activities and items that are not funded in the school budget. (Institute of Medicine, 2005) This means that they can be an especially sensitive issue in low-resource schools and school districts.

Most of these activities should be part of the regular school budget, of course. And there are other ways schools can raise funds that do not compromise their students' nutritional health, or highlight economic disparities between low-income students and those who can afford competitive foods. Non-food items can be sold, or fund-raising activities such as walkathons or fun runs can be held. (Institute of Medicine, 2005)

If schools decide to continue selling competitive foods, however, there are steps they can take to switch to healthier products and, at the same time, prevent a loss of revenue. Schools switching to a combination of healthier foods, such as 100 percent juice, low fat milk, water, yogurt, string cheese, fruits and vegetables generally have not lost revenue if the prices are reasonable. The nation's nutrition environment is changing and, as a result, many of the snack food and beverage companies that supply foods to schools have healthier items they can offer instead of soft drinks and candy. Holding taste tests for students and letting them participate in the choices helps ease acceptance.

Improving school meals

There is still a long way to go to improve the overall nutritional quality and attractiveness of meals in many schools (and in many child care, afterschool and summer programs). Increasing fresh fruits and vegetables and fruit and vegetable consumption, providing lean meats and low and nonfat dairy products, and increasing the availability of whole grains are all challenges that face those who want to improve school meals.

Many food service directors must wrestle with obstacles such as the expense of fresh fruits and vegetables; outdated or poorly maintained food preparation facilities; limited storage; and overall education budget issues in the community, which put increased pressure on the school meals budget.

These barriers do not relieve schools of the obligation - - legal, moral, and educational - - of improving their meals. Schools must implement practices that ensure that children are choosing and consuming meals that meet USDA's nutrition standards, including reducing fat and saturated fat, increasing fiber and reducing sodium. School districts and states must seek ways to improve the healthfulness of the commodities they order and receive, and the products that are manufactured with these commodities. School districts must re-evaluate the specifications they use to order food for school meals. If large, they need to use their buying power to demand the most attractive and healthful foods possible, and if small, they need to work together with other districts on collective buying to obtain the good nutrition their students deserve. School districts also must explore alternatives for obtaining appealing and high quality food - - including "farm-to-school" programs. School food service personnel and farmers need to learn how to speak each other's language, or find others who can help them work together, such as staff from local and state Cooperative Extension offices that are part of their states' land grant universities.

Along with providing high quality child nutrition, schools also can improve other aspects of the "nutrition environment" in which their students spend each day. Strategies like attractiveness, positive atmosphere and appeal of the cafeteria, enough room to be comfortable while eating, enough time for children to eat, scheduling at reasonable times (not too early or too late), keeping lines at reasonable lengths, scheduling recess before (and not during) lunch, and making sure the cafeteria is an educational environment (about nutrition and health) for children and youth are all important aspects of the nutrition environment. These can be special challenges for older and overcrowded schools with limited eating, waiting and cooking space, lack of food service equipment, and limited resources for making capital improvements. However, creativity can be applied to these challenges to make important improvements if they are seen as a priority issue for the health of low-income children. In addition, when schools are remodeled or rebuilt, the cafeteria is often the least considered aspect. School staff, school boards, and members of the community need to raise the importance of sufficient space and equipment and attractive facilities for the improved health and nutrition of children.

Physical activity and nutrition education

Many forces in our society encourage sedentary lives and many aspects of living with low family income add to and exacerbate these forces as they affect children and youth. Low-income schools must maintain and expand physical education and activity available to their students in spite of budget and time constraints.

The federal government and states have to provide resources to support, rather than cut, funding for physical education. States should require adequate periods of physical education in schools even though there is relentless pressure on the implementation of measures for academic achievement. Unhealthy children, even if they gain higher scores, do not make for a fully successful school. Moreover, cutting back on physical education is academically counter-productive: increased physical activity in schools has been shown to have a positive impact on improving overall achievement.

Again, creative thinking is required, including the incorporation of physical activity into classroom activities and afterschool programs to ensure that students are active every day. Recess of some kind, even if a traditional school playground is not available, is an essential aspect of ensuring time for physical activity. Community-based programs that are provided access to school facilities after school and during the summer can provide afterschool and summer activity programs that schools might not be able to afford. Local transportation agencies might be able to subsidize transportation to and from some physical activity programs.

With all the different kinds of foods that surround children these days - - from the school lunch to the fast food special to rows and rows of grocery store shelves - - children must be equipped with the motivation and knowledge to make healthy food choices. This is a challenge for schools that are strapped for time and resources, and are fighting hard to succeed in teaching the basics. Integrating nutrition information into standard subjects is one answer. Other solutions include: involving key stakeholders such as the school nurse, community physicians, local dietitians and college students studying nutrition to assist with the development of nutrition education programs; coordinating with the cafeteria staff to develop nutrition education activities and programs; and offering afterschool and summer programs with hands-on activities, such as cooking clubs, school gardens or bringing in local farmers and visiting their farms.

Programs that target the nutritional status of preschool children - - WIC and the Child and Adult Care Food Program - - also can make important contributions in the areas of physical activity and nutrition education.

WIC already offers nutrition education for pregnant and postpartum women. However, there are many challenges for the WIC program in doing this well, including limited staff, lack of resources for nutrition education and often inadequate facilities. Many WIC programs have been inventive in their efforts to make the most of their staff and facilities to reach low-income young families with nutrition education.

One important element in ensuring that more time and staff are available for nutrition education is the quality and efficiency of the systems, including computer technologies, used to enroll and monitor the benefits provided to participants. If paperwork tasks can be reduced, more nutrition staff resources are available for nutrition education.

A strategy for freeing up funds at the local level for nutrition services to the non-school population is for states to print WIC nutrition education materials that can be used by WIC clinics statewide, thereby reducing the local burden of materials-related costs. One tactic WIC programs have used to maximize the impact of limited staff is to encourage common nutrition messages from all the staff with whom a WIC client interacts. This comprehensive reinforcement of nutrition education messages takes full advantage of available staff. In addition, the use of trained paraprofessionals in the WIC clinic, many of whom were formerly participants in the WIC Program and are "nutritionally successful" mothers, can extend the reach of staff nutritionists. The WIC staff also can incorporate the encouragement of increased physical activity into their nutrition services. For example, WIC "activity kits" have been developed in some states that parents can take home and use to encourage their children to play in more physically active ways.

In CACFP, nutrition education and the encouragement of preschool children's natural inclination to be physically active are key elements. CACFP is operated by child care centers and by family child care providers who are sponsored by non-profit groups, called "sponsoring organizations," which monitor family child care homes and are intermediaries for the federal nutrition funds. Child care operations that participate in the Child Care Food Program are more likely to be connected to the broader child care arena, receiving training and technical assistance on food preparation, nutrition education for very young children and their parents, and ways to encourage physical activity among the children for whom they provide care. However, changes in the funding formula and increases in paperwork requirements for CACFP in family child care have reduced the ability of some sponsoring organizations to provide nutrition education services to the extent that they were previously able.

State and national level actions

In many states a wide variety of legislative initiatives have been introduced, and many enacted, to make the kinds of changes in schools that have been described in the previous pages. A large number of state education agencies and state boards of education are working through administrative action on similar kinds of policies to encourage or mandate these kinds of changes state-wide. If successful, these efforts can reach more children and faster than school-district-by-school-district change. Such policies can include: requiring recess; requiring a certain amount of physical education per week; creating nutrition standards for competitive foods to apply throughout the school day; mandating that schools must provide a School Breakfast Program; and requiring a specific level of nutrition education at each grade level.

At the national level, some of the key policy issues are: the inadequacy of the reimbursement for school meals; the need for the development and dissemination of creative solutions and additional resources for low-income schools which are struggling to implement effective wellness policies; improving the kinds of commodities available to schools; and creating national nutritional standards for foods that are sold in competition with school meals.

The Institute of Medicine (IOM) points out in Preventing Childhood Obesity: Health in the Balance (Institute of Medicine, 2005) that "federal reimbursements [for school lunches] at their present levels are insufficient to cover the remainder of the meals' actual costs," even taking into account some states' supplemental contributions and donated USDA commodity foods. Schools often sell competitive foods and beverages to raise funds that they need to support the school nutrition programs. Full funding for school meal programs, IOM suggests, could reduce the need to sell competitive foods and focus schools' attention on high quality nutritious meals and maximum participation, "and may also help alleviate any perceptions among students that only low-income individuals eat school meals." IOM suggests the development of "pilot programs to extend school meal funding in schools with a large percentage of children at risk of obesity."

This is an important concept. However, because of their increased challenges in trying to make change, low resource schools with a large percentage of children at increased obesity risk should be first in line for this assistance. With extra resources they could serve more attractive meals, full of the food nutritionists recommend, buttressed by school-wide promotions, and linked with nutrition education and physical activity opportunities. A combination of increased reimbursement and technical assistance in making effective changes and additions in the school environment could make an enormous difference in many low-income schools. If successful, this assistance program could be expanded, and taken up as well by state legislatures and the federal government.

A national school lunch budget increase to improve menu quality is not unprecedented. In England, in response to a recent national media campaign led by a celebrity chef, the government increased the nation's school lunch budget by approximately 530 million dollars. England, of course, has only a fraction of the children the U.S. does, so the equivalent increase here would be considerably larger. Schools in England are supposed to use these funds to improve the quality of meals served. According to England's Education Secretary, food high in fat, salt and sugar will be banned. (Reuters News Service, 2005)

In the United States, the school lunch reimbursement was cut by Congress in 1981, and that reduction has never been restored, even as fiscal pressures on school budgets and moves to serve more healthful lunches have increased. In that same year Congress also eliminated a very useful program that assisted low income schools in purchasing and repairing food service equipment. At a time when local school budgets are tighter than ever, and expectations for educational achievement are very high, school districts now expect the school lunch reimbursement to carry the full burden of the cost of food, food service staff, salaries and fringe benefits, equipment purchase and repair, and custodial services, lights and heat in the cafeteria. It is incumbent upon states and the federal government to ensure that reimbursements are sufficient to pay for the real costs of school lunches so that schools can serve meals that are nutritious, healthful and appealing in pleasant and positive nutrition environments.

Another very important element of change at the national level is the need for a clearinghouse of programs, strategies and policies that are possible for low-income schools to operate effectively, and affordable technical assistance on how to make these changes.

In addition, it is often overlooked that commodities make up about one-fifth of the resources schools have to work with in producing their school lunches. In general, the decisions about which commodities are available or purchased are not driven by concerns about children's well-being. These programs and the ways in which they operate at the state and local levels need to be reviewed to incorporate new strategies for making them more responsive to current concerns about children's health. Also, the very popular, but limited, Department of Defense fresh produce delivery program to schools should be examined for broader replication.

Finally, schools and states are struggling to develop nutrition standards for competitive foods. The Institute of Medicine has received funding to develop suggestions for such standards. The broad dissemination of good IOM standards, given its reputation for objective scientific consensus that is evidence-based, should be very helpful to schools and states in their efforts to improve the foods students are exposed to during the school day. If USDA were to make these standards, or some version of them, into required national standards, this would be very helpful. Moreover, Congress could change the law covering competitive foods to extend the Secretary of Agriculture's authority over these food items to the total school campus and the entire school day, rather than the current limitation to the cafeteria and the breakfast and lunch periods.

Conclusion

Both food insecurity and obesity tend to affect low-income people more than those with higher incomes (although the relationship between obesity and poverty does not hold for all gender, age racial, and ethnic sub-groups). In addition, racial and ethnic minorities are considerably more likely to be food insecure, and tend to be more at risk for obesity than non-Hispanic Whites. What has surprised many is that food insecurity and obesity can affect the same individuals, households, and communities. In fact, a number of studies have demonstrated a strong association between food insecurity and obesity among low-income women.

Both food insecurity and obesity have negative consequences for the children, adults, and families they affect. Food insecurity results in poorer quality diets, compromised child and adult health, mental health problems, and educational deficits among children. Obesity increases the risks for low self-esteem and depression, type 2 diabetes, pulmonary complications such as asthma and sleep apnea, and hypertension among children and adults, and also increases adult risk for a number of diseases and conditions, including cardiovascular disease, some cancers, and arthritis.

The federal child nutrition programs can play a crucial role in preventing both food insecurity and obesity, as well as in increasing economic security and improving nutritional intake. When the full potential of the nutrition programs is achieved, they also can contribute to improvements in the general nutrition environment in schools and students' physical activity levels. Thus, it is of paramount importance to protect and increase broad access to federal nutrition programs, to assure that the nutrition programs provide optimal benefits, and to maintain and strengthen the programs' national nutrition standards.

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Robert Wood Johnson Foundation
Center to Prevent Childhood Obesity

Child Nutrition Programs: Federal Options and Opportunities

By Robert Wood Johnson Foundation Center to Prevent Childhood Obesity, Childhood Nutrition Working Group

Childhood obesity threatens the health of our young people and their future potential. Today, more than 23 million children and adolescents in the United States – nearly one in three – are overweight or obese, putting them at risk for serious, even life-threatening problems (1, 2).

As we look for solutions to this epidemic, we must improve nutrition and increase physical activity through policy and environmental change. In the coming months through the Child Nutrition and WIC Reauthorization Act, Congress has an important opportunity to improve and enhance federally-funded child nutrition programs, including the National School Lunch Program (NSLP), School Breakfast Program (SBP), the Child and Adult Care Food Program (CACFP), the Summer Food Service Program (SFSP), and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). Combined, these programs touch the lives of millions of children and adolescents each and every day.

The Robert Wood Johnson Foundation Center to Prevent Childhood Obesity is a national organization dedicated to reversing the childhood obesity epidemic by changing public policies and creating healthier environments in schools and communities. The center's focus is on preventing childhood obesity. Enhancing these important programs that impact millions of children by promoting healthy eating and physical activity, and improving food security and access can help.

What the Research Tells Us

Youth's dietary habits and practices play a critical role in their current and long-term health and well-being. Unfortunately, youth's diets are not consistent with current national dietary recommendations for good health (3, 4). Children do not consume enough fruits, vegetables, whole grains, and low-fat dairy products, and they take in too much total fat, saturated fat, added sugars, and sodium (5-11). Moreover, teenage girls and children in low-income households, particularly, are at high risk for poor dietary intake (5, 7-11). Research suggests that an intake of an excess of 160 calories per day among youth can be attributable to the increase in population obesity prevalence over time (12).

Given that youth spend a significant portion of their day—and lives—in school, the school environment plays a critical role in shaping their dietary and physical activity behaviors. For example, on any given school day, the NSLP provides lunches to nearly 31 million students and the SBP provides breakfasts to over 9 million participating youth (13). In addition to the NSLP and SBP, students can access foods and beverages a la carte while in the cafeteria, and from school vending machines, and school stores (5, 14). Foods and beverages sold in these venues, termed "competitive" because they are sold outside of the federally reimbursable meal programs (15, 16), can also shape youth dietary behaviors, as they are widely available in the vast majority of schools (5, 14).

Findings from the Third School Nutrition Dietary Assessment (SNDA III) study (5), specifically, show that while many schools are continuing to improve the quality of school meals and competitive foods, more could and should be done. Key findings from SNDA III, highlighted below, add to the growing body of research that serves the important role of helping shape and guide policy decisions and may ultimately lead to improved child nutrition programs and healthy school environments.

School Meals

- NSLP participants were significantly less likely to consume competitive foods and sugar-sweetened beverages at school.
- Students who participate in SBP had a lower likelihood of being overweight and obese than non-participants.
- Elementary school children who were offered fruits and vegetables during lunch consumed significantly fewer calories from low-nutrient, energy-dense foods, and consumed more fruits and vegetables during the school day.
- Whole milk is still available in over one-third of school lunch menus.
- Processed commodities (United States Department of Agriculture (USDA) Foods) and other commercially prepared foods (like pizza, chicken nuggets, beef patties and burritos) accounted for 40 percent of the lunch entrees available, and they were among the top contributors of calories, fat and sodium in lunches.

Competitive Foods

- One or more sources of competitive foods were available in 73 percent of elementary schools, 97 percent of middle schools, and 100 percent of high schools.
- 40 percent of students consumed one or more competitive foods on a typical school day.
- Competitive food intake increase with grade level and are most prevalent in high schools.
- Most common competitive foods were low in nutrients and high in energy, including candy, desserts, salty snacks, and sugar-sweetened drinks.
- Students who attended middle and high schools with more restrictive competitive foods policies consumed fewer calories from sugar-sweetened beverages.

While SNDA III focused on the school environment, there is a growing body of evidence pointing to the important role that child care programs play in establishing healthy eating and physical activity patterns at an early age (17-20). Child care facilities provide a valuable opportunity to promote healthy eating and physical activity behaviors in children. The alarming rates of obesity among children in the United States make the opportunity to introduce healthy behaviors during early childhood especially important. Between 1971 and 2004, the rate of obesity among children ages 6 to 11 years increased nearly fivefold (from 4 percent to 19 percent), and the rate among preschool children ages 2 to 5 years nearly tripled (from 5 percent to 14 percent) (21). Today, one-third of all children and adolescents in the United States are either obese or at risk for becoming obese.

Recommendations

The recommendations outlined below cover the main child nutrition programs that are part of the Child Nutrition and WIC Reauthorization Act and are organized as follows:

I. School Based
II. Child and Adult Care Feeding Program
III. Summer Food Service Program
IV. Special Supplemental Nutrition Program for Women, Infants, and Children (WIC).

The recommendations and action steps suggested by the RWJF Center are aligned with those put forth by other national organizations, coalitions, and alliances, including National Alliance for Nutrition and Activity (NANA), Child Nutrition Forum, National WIC Association (NWA), School Nutrition Association (SNA) and Food Research and Action Center (FRAC).

I. School-Based Recommendations

Approximately 50 million 5 to 19-year-olds attend elementary and secondary schools—a number that represents over 80 percent of all children in the United States (22-24). Given that children spend a significant amount of time at school, most months of the year, they consume a substantial portion of their daily calories at school. The school environment plays a critical role in the short- and long-term health behaviors among youth—including those associated with food and beverage choices and habits. The federal government invests a significant amount annually—over $10 billion—in school lunches and breakfasts (25).

A. Recommendation: Improve the nutritional quality of foods and beverages in all schools (includes school meals and foods and beverages sold or available outside of the federally reimbursed school meal programs.)

Improvements to the nutritional quality of all foods and beverages sold and served in schools is critical in helping youth consume a diet consistent with the Dietary Guidelines for Americans and in helping to protect the federal government's $10 billion-a-year investment in the NSLP and SBP. The Institute of Medicine (IOM) is currently reviewing school meal patterns and nutrition standards and will be issuing its Review of National School Lunch and School Breakfast Program Meal Patterns and Nutrient Standards. Once issued, this report should be acted upon quickly by the USDA. Rulemaking to update meal patterns should proceed expeditiously. In addition, the USDA's nutrition standards for foods sold outside of school meals are outdated—over 30 years old. Updated nutrition standards support healthy eating by youth, reduce competition of unhealthy foods with school meals, increase participation in school meals, and reduce stigma associated with school nutrition programs. Higher reimbursement rates are also needed to help schools improve the nutritional quality of meals and to cover the increased cost of food, energy, and labor and to better align school meals with the Dietary Guidelines for Americans.

Actions

- ✓ *Once the IOM issues its meal pattern report, direct the Secretary of Agriculture to initiate the rulemaking process to update the NSLP and SBP meal patterns.*
- ✓ ***Note:*** *The IOM report is expected in late fall 2009 or early 2010.*
- ✓ *Update national nutrition standards for foods and beverages served outside of the school meal programs and apply them to the entire campus for the full school day.*
- ✓ *Require that a nutrition professional be employed or consulted with at the district level for school food service.*
- ✓ *Increase federal reimbursement rates for school lunch and breakfast.*

B. Recommendation: Enhance and Strengthen Local School Wellness Policies.

The local school wellness policy requirement, established by the 2004 Child Nutrition and WIC Reauthorization Act, has led to many schools adopting policies for foods sold on campus, physical activity, and nutrition education. They have become a key means by which to implement national and state nutrition standards, while allowing for flexibility in addressing local needs. Local school wellness policies also provide a means for schools to address additional aspects of the food and physical activity environment—from school parties and food rewards to recess. However, the majority of school wellness policies need to be strengthened and better implemented, with periodic review, revision, and reporting mechanisms in place, as well as an implementation plan. Wellness policy committees should also be permanent committees and should comprise a variety of stakeholders that have an impact on healthy eating and physical activity within the school environment.

Actions

- ✓ *School districts should notify and make easily accessible their wellness policies and implementation plans to students, parents, school staff, and state officials.*
- ✓ *School districts should include an implementation plan, periodically assess and measure implementation; look to recommended model wellness policies as a guide, and update policies as necessary.*
- ✓ *A standing wellness policy committee should be in place (or should work within existing school health committees) to lead development, notification, implementation, and assessment of policies.*
- ✓ *Wellness policy committees should be comprised of stakeholders with an interest in, and impact on, healthy eating and physical activity promotion efforts among youth.*
- ✓ *Goals for physical education and policies on food marketing and advertising in schools should be added to the policies.*

C. Recommendation: Remove statutory barriers so that schools can serve only 1percent and fat-free milk.
Milk remains the largest source of saturated fat in children's diets (26). Congress needs to eliminate the statutory barrier currently in place that makes it hard for schools to serve only fat-free and 1% milk, as recommended by the Dietary Guidelines.

Note: This is a cross-cutting recommendation. This provision should apply to all child nutrition programs that serve children two years and older including SFSP and CACFP.

Action
- ✓ *Eliminate the statutory barrier currently in place that makes it hard for schools to serve only fat-free and 1 percent milk, as recommended by the Dietary Guidelines.*

D. Recommendation: Strengthen accountability of and compliance with school meals standards.
The IOM is completing recommendations to update school meal patterns and nutrition standards. A follow up study is recommended to ensure that schools are making efforts to meet standards and the USDA is equipped to better assess the progress that is being made by schools in their efforts to improve meal quality.
Note: The IOM meal patterns and nutrition standards report is expected in late fall 2009 or early 2010.

Action
- ✓ *Provide funding for an IOM study to examine the evaluation system used to measure compliance with school meal standards and provide recommendations to the USDA to strengthen the current evaluation system.*

E. Recommendation: Reform and Fund the Team Nutrition Network.
Team Nutrition Networks were established by the 2004 Child Nutrition and WIC Reauthorization Act but never fully funded. A well funded Team Nutrition Network (TNN) should include state-level staff, dedicated to developing and supporting evidenced-based policies and programs that promote healthy eating and physical activity through educational, social, and marketing approaches. Furthermore, the TNN should be coordinated at the federal level, administered at the state level, and implemented at the local level to ensure support for nutrition education and promotion, school wellness policy implementation and evaluation, improved nutritional quality of foods and beverages provided through child nutrition programs, improved child nutrition program participation, and greater coordination among existing nutrition programs and efforts.

Note: This is a cross-cutting recommendation. While many of the TNN efforts will be implemented in schools, other child nutrition programs such as CACFP and SFSP would benefit from a strong and well-funded TNN initiative.

Actions

- ✓ *Provide adequate funding to strengthen the TNN that will allow for federal, state, and local networks to develop and promote effective nutrition education and promotion efforts and to coordinate with existing efforts occurring in states such as the Supplemental Nutrition Assistance Program (formerly Food Stamps), Nutrition Education (SNAP-ED) efforts, and the Centers for Disease Control and Prevention's Coordinated School Health.*
- ✓ *Provide training, technical assistance, and grants to: expand, implement, and evaluate nutrition education; strengthen local school wellness policies; improve the food environment; improve food safety; implement nutrition standards; improve commodity choices and processing; leverage existing state and local networks and resources; increase utilization of national child nutrition programs; and identify and disseminate best practices.*

F. Recommendation: Support enhanced training and technical assistance for child nutrition professionals via the National Food Service Management Institute (NFSMI).

The NFSMI, located at the University of Mississippi and administered through a Memorandum of Understanding with the USDA, develops materials and training programs and provides training and technical assistance to states, local agencies, schools and other child nutrition program operators to improve food, meal, and snack quality, and to enhance overall program operations.

Note: This is a cross-cutting recommendation. NFSMI develops materials and other training opportunities for all child nutrition programs including schools, CACFP, and SFSP. All child nutrition programs would benefit from enhanced funding for NFSMI.

Actions

- ✓ *Increase funding for the NFSMI to develop and provide training and technical assistance to states, local agencies, and program operators on topics such as: meal and snack quality; USDA Foods (formerly known as commodities) to enhance purchases and processing options to align with dietary guidelines; local school wellness policies; and nutrition education and promotion.*

G. Recommendation: Support the expansion of farm-to-school programs that stimulate local economies and strengthen connections with agriculture.

Farm-to-school programs provide an approach to connecting small farms to the school meal programs, encourages small farmers to sell fruits and vegetables to schools, and supports schools in their efforts to buy locally. Effective farm-to-school initiatives are based on the cooperation of federal, state, and local governments, as well as local farm and educational organizations.

Action

- ✓ *Provide a comprehensive approach to connecting small farms to the school meal programs, encourage small farmers to sell fruits and vegetables to schools, and encourage schools and districts to work with local farmers.*

II. Child and Adult Care Food Program (CACFP) Recommendations

CACFP plays a vital role in improving the quality of child care and making it more affordable for many low-income families. CACFP also provides a valuable opportunity to promote healthy eating and other health promoting behaviors in children at an early age. Each day, about 2.9 million children receive nutritious meals and snacks through CACFP (27). In addition, CACFP provides meals to children residing in emergency shelters and snacks and suppers to youths participating in eligible afterschool care programs. The total cost of the program is $2.4 billion a year (27). Through in-home visits, group classes, and ongoing assistance and support, CACFP-sponsoring organizations and state agencies teach child care providers not just the importance of good nutrition but also practical advice and guidance on serving nutritious food.

A. Recommendation: Improve the child care environment by enhancing the nutritional quality of meals and snacks served and available center-wide.

The quality of the meals and snacks offered is paramount to meeting the needs of hungry, low-income children. CACFP meal patterns have not been updated in over 20 years. In light of the need for updated meal patterns, the USDA has requested that the IOM make recommendations on revising the CACFP meal patterns and nutrition standards to make them consistent with the Dietary Guidelines, other nutrition science, and knowledge of child development. This report should also include the reimbursement rates necessary to cover the costs of the new meal pattern. The USDA will take the next step in their efforts to update the CACFP meal pattern after they receive the IOM report. Once issued, this report should be acted upon quickly by the USDA. Rulemaking to update meal patterns should proceed expeditiously. In the meantime, the USDA could enhance training and technical assistance to states and localities to improve meal and snack quality in CACFP. USDA should continue to update meal patterns when the Dietary Guidelines for Americans warrant further revisions. TNN funds should be used to assist CACFP sponsors in promoting nutrition education and physical activity.

Actions

- ✓ *Direct the Secretary of Agriculture to provide training, technical assistance, and guidance to states and child care program providers on how to enhance and improve the nutritional quality of all foods and beverages available in the child care setting.*
- ✓ ***Note:*** *These actions are to continue to provide up-to-date evidence and best practices on serving healthy foods while the IOM report development and CACFP rulemaking process are underway.*
- ✓ *Once the IOM issues its CACFP meal pattern report, direct the Secretary of Agriculture to initiate the rulemaking process to update the CACFP meal patterns, as well as training and technical assistance to implement the new patterns.*
- ✓ *Direct the Secretary of Agriculture to develop recommendations for nutrition standards for all CACFP non-reimbursable foods and beverages served during the day.*
- ✓ *Direct the Secretary of Agriculture to provide training, technical assistance, and guidance to states and child care program providers on how to enhance and improve the child care environments to promote healthy behaviors such as nutrition education, physical activity, and alternatives to screen time.*
- ✓ *Increase the reimbursement rate for CACFP.*

III. Summer Food Service Program (SFSP) Recommendations

During the school year, nutritious meals are available through the NSLP and SBP, but these programs end when school ends for the summer. SFSP helps fill the hunger gap and is the single largest federal resource available that combines a nutrition assistance program with a summer activity program. Last year, SFSP was administered in nearly 33,000 sites at a cost of $327 million (28).

A. Recommendation: Improve the nutritional quality of SFSP meals served.

As in school lunch and CACFP, the quality of the meals and snacks offered is paramount to meeting the needs of hungry, low-income children during the summer. While the IOM is in the process of making recommendations for school meals and CACFP, the USDA could and should act within its current authority to provide guidance and technical assistance to improve the quality of SFSP meals. The USDA should also look to revise SFSP meal patterns that build on the impending IOM recommendations for school meal patterns and nutrition standards.

Actions

- ✓ *Direct the Secretary of Agriculture to provide training, technical assistance, and guidance to states and SFSP program providers on how to improve the nutritional quality of meals served within the current meal pattern requirements.*
- ✓ *Once the IOM issues its meal pattern and CACFP reports, direct the Secretary of Agriculture to issue proposed regulations updating the SFSP meal patterns in a timely manner.*
- ✓ *Increase SFSP meal reimbursement rates.*

B. Recommendation: Promote physical activity and nutrition education.

Summer programs that provide meals as part of the SFSP also provide enrichment activities such as recreational or educational programs. Quality meals, coupled with meaningful nutrition education and promotion, and physical activities will attract youth and keep them coming back to SFSP sites, helping ensure that their nutritional well-being is protected during the summer. TNN funds should be used to assist SFSP sponsors in promoting nutrition education and physical activity.

Action

- ✓ *Sponsors should be provided with adequate support and funds to incorporate nutrition education and physical activity into their summer enrichment programs.*

C. Recommendation: Expand access for low-income children to SFSP.

Action

- ✓ *Expand open-site eligibility for the SFSP.*

  ***Note**: the current area-eligibility requirement is set at 50 percent of families with incomes at or below 185 percent of the Federal Poverty Level; a 40 percent cap would allow more children to participate.*

IV. Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Recommendations

The WIC program provides nutrition education, breastfeeding promotion and support, monthly food packages, and access to maternal, prenatal, and pediatric health care services. In 2007, WIC served over 8.2 million participants each month, including over six million infants and children, with costs of approximately $6.2 billion dollars (29). WIC has prevented health problems in young children and mothers and improved health for over 30 years.

A. Recommendation: WIC food packages should remain consistent with the recommendations set forth by the IOM and should be fully implemented by states through the federal regulatory process.

In 2008, the USDA updated the WIC food packages to align with current nutrition science – the Dietary Guidelines for Americans. These revisions reflect most of the recommendations put forth by the IOM and provide WIC mothers and their children with more fruits, vegetables, and whole-grain products.

The USDA issued an interim final rule and states are to fully implement the revised food packages by October 2009.

Action

- ✓ *Congress should ensure the USDA issues a final rule regarding the WIC food packages no later than September 2010.*

B. Recommendation: Review and update the WIC food packages to ensure they are consistent with current nutrition science.

The nutritional value of the food packages and the type of food products included in the WIC food packages must be science based. The changes made in 2008 were the first significant changes made to the food package in 30 years. These reflect the recommendations from the IOM to include fruits and vegetables, culturally appropriate foods, reduced quantities of eggs and juice, milk substitutes, and low fat dairy products in the food packages. States are now implementing those changes.

Action

- ✓ *To assure continued integrity of the food packages, Congress should mandate the review of the WIC food packages by the IOM every 10 years or when changes occur in national nutrition science.*

C. Recommendation: Promote and emphasize the importance of breastfeeding in WIC and emphasize breastfeeding support and promotion as an integral part of nutrition education.

Breastfeeding is the normal and most healthful way to feed infants and the benefits to infants and mothers are numerous. For children, science shows that human milk may lower the risk of obesity in childhood and adolescence, promotes and supports development, protects against illness symptoms and duration, improves IQ and visual acuity scores, lowers cancer rates, decreases cavities and the likelihood of braces, improves premature infants' health, and significantly reduces health care costs. For mothers, breastfeeding decreases the likelihood of ovarian and breast cancers, reduces the risk of osteoporosis and long-term obesity, increases bonding between mother and child, and significantly reduces the incidence of child neglect (30-32).

Actions

- ✓ *Add the phrase "breastfeeding support and promotion" to each reference related to WIC for nutrition education.*
- ✓ *Increase funding and resources to assure more breastfeeding mothers gain access to critical breastfeeding support.*
- ✓ *Allow use of contingency funds for breast pumps to support breastfeeding mothers.*

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Study finds lack of food plaguing more families

BY NANCY COLE

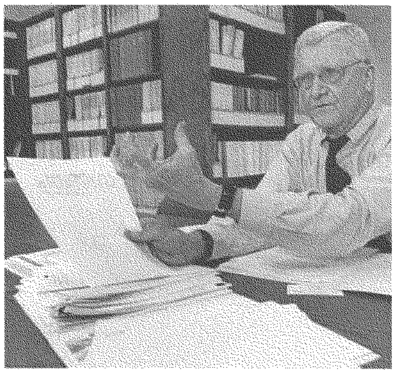
LITTLE ROCK — The number of families with young children who lack enough food for an active, healthy life doubled between 2007 and 2008 - putting more infants and toddlers at greater risk for growth and learning problems, a study of Arkansas Children's Hospital patients has found.

"We have found a striking doubling in the prevalence of what we call 'food insecurity,'" said Dr. Patrick Casey, a developmental pediatrician with the University of Arkansas for Medical Sciences.

"Food insecurity" is a federal designation that means a family lacks a regular or steady supply of nutrition.

The study was based on more than 700 surveys conducted annually since 1999 of families who took children ages 3 or younger to the emergency department at Arkansas Children's Hospital in Little Rock.

The share of households reporting a lack of enough food jumped from 10.7 percent in 2007 to 22.2 percent in 2008.



Dr. Patrick Casey, a developmental pediatrician, said there is a marked rise in the number of Arkansas families with young children who lack access to adequate food.

The more than 107 percent increase is especially noteworthy, Casey said, because families' access to food had been relatively stable from 1999 through 2007.

The recession and record 2008 increases in fuel and food prices clearly were tough on Arkansas families, Casey said.

However, scrimping on children's food can lead to poor health, hospitalization, behavioral problems, developmental delays and poor performance in school and the workplace, he said.

Malnutrition in children under 3, when they're in a critical period for brain growth, can have lifelong implications, Casey said.

A lack of access to food for some families in Arkansas comes as no surprise to Rhonda Sanders, executive director of Arkansas Hunger Relief Alliance, a statewide association of six food banks.

Food pantries in the alliance have seen substantially increased demand for their services, up as much as 20 percent during the past year, Sanders said.

"And they're reporting different folks coming, folks who've never used the food-pantry system before," she said.

Families with younger children typically have fewer resources, so they are among those hardest hit by job losses, Sanders said.

Access to food in the United States was first measured in 1995, said Mark Nord, a sociologist in the food assistance branch of the U.S. Department of Agriculture's Economic Research Service.

"We've had annual measurements since then," said Nord, lead author of the most recent report, "Household Food Security in the United States, 2007," which was released last November.

Since 1999, U.S. families' access to food has never fluctuated by more than 1 percent in a single year, he said.

From 2005 through 2007, 11 percent of U.S. households lacked enough food at some point. During that period, Arkansas ranked fourth in "food insecurity" - behind Mississippi, New Mexico and Texas - with an average of 14.4 percent of the state's households classified as "food insecure."

The 2008 report is scheduled for release in November, Nord said.

The research at Arkansas Children's Hospital is part of a collaborative, multisite project known as Children's Health-Watch. Based in Boston, the project seeks to improve child health by collecting evidence and analysis from the frontlines of pediatric care to policymakers and the public.

Children's Health Watch studies not only nutrition but also housing, energy, immigration and other issues that affect children's health and learning potential.

Data are collected in emergency rooms and clinics at five sites: Arkansas Children's Hospital, Boston Medical Center, the University of Maryland School of Medicine in Baltimore, Hennepin County Medical Center in Minneapolis and St. Christopher's Hospital for Children in Philadelphia.

Primary adult caregivers accompanying children up to age 3 are invited to participate in the survey. They are asked the same 18 questions used by the federal government, 10 of which apply to all households and eight of which apply only to households with children.

Two questions refer to uncertainty about having enough food and the experience of running out of food. The remaining 16 questions address reduced quality, variety or desirability of diets; increasingly severe disruptions of normal eating patterns; and reductions in food intake.

Three or more affirmative responses are required for a household to be classified as lacking access to food.

"We're quite confident that between 2007 and 2008 something very significant happened in the Little Rock area," said Elizabeth March, executive director of Children's HealthWatch.

"We saw increases everywhere," up 22.8 percent overall at the group's five research sites, March said.

"Most of the other sites are in that kind of range," she said, well below Arkansas' increase of more than 107 percent.

March and Casey stressed that Arkansas' figures have been adjusted to statistically account for a number of factors.

"We wanted to be really sure that what we were seeing was something that was really happening and not a phenomenon of a different population coming into the emergency room," March said.

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CHILDREN'S HEALTHWATCH POLICY *ACTION* BRIEF

Even Very Low Levels of Food Insecurity Found to Harm Children's Health

Defining and Measuring Food Insecurity

Food Secure: When a household consistently has the resources to obtain enough nutritious food, it is "food secure." In 2006, the USDA split this group of households into two categories: "highly food secure" and "marginally food secure."

Food Insecure: If a household lacks consistent access to enough nutritious food, it is "food insecure." In 2006, what had previously been called "food insecurity" became "low food security," and what had been called "food insecure with hunger" became "very low food security." Frontline anti-hunger advocates often refer to both of these categories as "hunger."

The Food Security Scale: The government measures household food security with an 18-question Food Security Scale (FSS) administered each December by the Census Bureau. A household's food security status is determined by the number of questions it answers affirmatively.

What We Know about Food Insecurity's Effects on Children

Census Bureau data for 2007 identified 12.4 million children as living in low or very low food-secure households. Research suggests that children whose families experience low or very low food security suffer damaging effects in the following domains[1]:

- Brain and cognitive development in the perinatal period (0-3 yrs)
- School readiness in preschool years (0-5 yrs)
- Learning, academic performance and educational attainment during school years (6-17 yrs)
- Physical, mental, and social development, growth and health throughout childhood (0-17 yrs)
- Psychosocial functioning and behavior, and mental health during school years (6-17 yrs)
- Child health-related quality of life, perceived functionality, efficacy and "happiness/satisfaction" during school years (6-17 yrs)
- Some, not yet clear associations with obesity throughout childhood (0-17 yrs)

Summary of Findings

1. **The government system used to classify families struggling to access sufficient nutritious food does not capture the true impact of the problem on children's health and development.**
2. **Children in marginally food-secure households, who are traditionally counted by the government as food secure, are at serious risk of health and developmental problems.**
3. **Many of the 2.6 million children under age five living in marginally food-secure households are not receiving needed nutritional support through WIC.**

# of FSS questions answered affirmatively	Category
0	Highly Food Secure
1-2	Marginally Food Secure
3-7	Low Food Security
8 or more	Very Low Food Security

New evidence of harm to very young children in marginally food-secure households

New research by Children's HealthWatch found that children suffer negative health and developmental effects at very low levels of inadequate access to nutritious food. Children under age three in marginally food-secure households were found to have health outcomes that are significantly worse than children in fully food-secure households. They are more likely to:

- Be in fair/poor health
- Be at risk for developmental delays
- Have been hospitalized since birth
- Lack stable housing
- Live in households with inadequate heating or cooling
- Have caregivers experiencing symptoms of depression
- Have caregivers with fair/poor health

By not classifying these households as food insecure, it suggests they are not at risk. We know, however, that they are not only at increased risk of poor health but that many are not getting the nutritional assistance for which they are eligible. Census Bureau data from the December 2007 Current Population Survey show that 70 percent of marginally food-secure children under age five lived in households with incomes below 185 percent of poverty (the gross income eligibility level for WIC). Of those, only 44 percent were receiving WIC.

Millions of Children Lack Consistent Access to Nutritious Food

Census Bureau data for 2007 identified 12.4 million children as living in low or very low food-secure households. Another 8.8 million were in marginally food secure households.

Age of Children	Marginally Food Secure Number (%)	Low Food Security Number (%)	Very Low Food Security Number (%)
Ages < 18 Yrs	8.8 million (11.9%).	8.7 million (11.8%)	3.7 million (5.1%)
Ages 5-17 Yrs	6.1 million (11.8%)	6.1 million (11.8%)	2.8 million (5.4%)
Ages < 5 Yrs	2.6 million (13.1%)	2.5 million (12.4%)	0.9 million (4.5%)
Ages < 3 Yrs	1.5 million (12.8%)	1.5 million (13.2%)	0.5 million (4.4%)

Source: Census Bureau, CPS, US Food Security Scale, December 2007

What do other researchers report about marginal food security?

Other researchers have also found evidence of harm to children and pregnant women in marginally food-secure households.

- The well-controlled Early Childhood Longitudinal Study (ECLS) found adverse impacts on school performance, social functioning, weight status and health of children in kindergarten to third grade in children in families with any affirmative responses to FSS questions.[2]
- Even in kindergarten, children in households with any signs of marginal food security score lower and learn less during the school year.[3]
- Another rigorous study of pregnant women found those who were marginally food secure had higher perceived stress, anxiety and depression scores than similar food-secure women.[4]

Conclusion

Marginal food security harms children's health and development. Research from Children's HealthWatch and others shows that children in marginally food-secure households are at greater risk for health problems, developmental delay, and impaired school performance than children in food-secure households. These findings argue for child nutrition programs that reach the broadest spectrum of children whose families may be struggling, even at the margins, to put enough nutritious food on the table. They also strongly suggest that a national discussion is needed around the terminology used to classify levels of access to adequate food and nutrition.

This Policy Action Brief was prepared by John T. Cook, PhD, Children's HealthWatch Co-Principal Investigator, Elizabeth L. March, MCP, Children's HealthWatch Executive Director, and Stephanie Ettinger de Cuba, MPH, Children's HealthWatch Research and Policy Director.

Children's HealthWatch is a non-partisan pediatric research network that carries out research on the impact of economic conditions and public policies on the health of children under age three. For more than a decade, Children's HealthWatch has interviewed families with young children in emergency departments and urgent care clinics in five hospitals in Baltimore, Boston, Little Rock, Minneapolis and Philadelphia that serve largely low-income families. Data are collected on a wide variety issues including demographics, food security, public benefits, caregivers' health, health insurance and earnings, housing, home energy conditions and children's health status and developmental risk.

[1] Cook & Frank, NYAS, 2007.

[2] Jyoti, Frongillo et al., The Journal of Nutrition 2005

[3] Winicki & Jemison, Contemporary Economic Policy 2003

[4] Laraia, et al., The Journal of Nutrition 2006

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ORIGINAL ARTICLE

Overweight children, weight-based teasing and academic performance

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Abstract
Background. School performance of overweight children has been found to be inferior to normal weight children; however, the reason(s) for this link between overweight and academic performance remain unclear. Psychosocial factors, such as weight-based teasing, have been proposed as having a possible mediating role, although they remain largely unexplored. *Methods.* Random parental telephone survey data (N = 1 071) of public school students collected as part of the statewide evaluation of Arkansas Act 1220, a law to reduce childhood obesity, were used. Overweight status (body mass index $>85^{th}$ percentile for gender and age) and weight-based teasing were examined as predictors of poorer school performance. *Results.* Overweight status was a significant predictor of poorer school performance (OR = 1.51; 95% CI = 1.01, 2.25), after adjustment for gender, school level, free and reduced lunch participation, and race. However, the addition of weight-based teasing to the model (with weight category and covariates) reduced the weight category parameter estimate by 24%, becoming non-significant (OR = 1.40; 95% CI = 0.93, 2.10) and indicating a possible mediating effect of weight-based teasing on the relationship between weight category and school performance. Weight-based teasing was significantly associated with school performance, with lower odds of strong school performance among weight-based teased children (OR = 0.44; 95% CI = 0.27, 0.74). *Conclusion.* Psychosocial variables, such as weight-based teasing, should be considered in future research examining the impact of childhood obesity on school performance and in future intervention studies.

Key words: *Children, overweight, policy, schools, achievement, stigmatization, students, public health*

With overweight becoming more prevalent among children (1), the potential impact of overweight status on school performance is receiving increased attention. (We use the terms overweight and obese throughout the report to minimize confusion and convey the magnitude of risk associated with excess weight in children, consistent with recent American Medical Association recommendations (2)). A recent review (3) and other recent studies (4,5) consistently have found that overweight children performed worse academically than normal weight children, even when studies controlled for demographic factors, such as socioeconomic status and parent educational level. Despite evidence demonstrating this association, the reasons for the link between overweight and school performance remain unclear; however, as recent research (5) found both self-esteem and depression to be significant predictors of academic achievement independent of weight status, psychosocial factors may play an important mediating role in the association between overweight and school performance.

Weight-based stigma has been proposed as a possible specific psychosocial factor that may mediate the relationship between overweight and school performance (6). Previous research has found that children report experiencing weight-based teasing most often in the school setting (7). Overweight children, in particular, experience significantly more weight-based teasing (8–11) as well as more non-weight based teasing (12). Neumark-Sztainer and colleagues (7) found peer weight-based teasing prevalence rates of 63% for girls and 58% for boys who were in the highest body mass index (BMI) category ($\geq 95^{th}$ percentile). Weight-based teasing appears to be more prevalent for girls compared with boys (8,9).

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Weight-based teasing has been noted among very young children aged 3–4 years old (13), although school-age children appear to experience higher rates (12,14). Reviewing the available evidence on the association between race and weight-based teasing, Puhl and Latner (6) concluded that the findings were mixed and inconclusive. Weight-based teasing has received particular attention because there is a growing body of evidence that suggests weight-based teasing is associated with or may prospectively produce a range of negative psychosocial outcomes, including disordered eating (7,10,15), anxiety (8), low self-esteem (16), and depression, suicidal ideation and suicide attempts (15).

Consistent with the research indicating greater weight-based teasing among girls compared with boys, several studies suggest that gender may affect the relationship between overweight and academic performance. Specifically, overweight girls have greater negative school performance-related consequences than overweight boys (4,17). It may be that girls internalize weight bias and weight-based teasing more than boys, potentially reflecting a greater emphasis on physical appearance among females (18). Further evaluation of other demographic variables, such as age and race, may also prove to be helpful in elucidating the relationship between overweight status, academic performance, and weight-based teasing.

Therefore, the current study undertook an examination of whether overweight status (BMI $\geq 85^{th}$ percentile for gender and age) was a significant predictor of poorer school performance in a statewide sample of children, as well as in specific demographic groups of interest. In addition, the impact of weight-based teasing on school performance was examined.

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Methods

Study design

Data were obtained from an annual, cross-sectional telephone survey of randomly selected parents of Arkansas public school children, which was conducted as part of an ongoing evaluation of the Arkansas Act 1220 of 2003. This Act is a multifaceted legislated policy designed to reduce childhood obesity (19). The survey fielded in 2006 was administered to 2 358 parents (55% cooperation rate).

Survey methods and instruments

As described in detail elsewhere (20), survey sampling methods utilized a stratified, multi-stage sampling procedure. To ensure a representative sample of parents with children attending public schools, the sampling frame accounted for geographic region in Arkansas (north, northwest, southwest, central and east), school type (elementary, middle, and high school) and school size (small, medium, and large). Alternative and special schools were excluded along with those with enrollments of less than 100 students. School enrollment data obtained from the Arkansas Common Core of Data from the National Center for Education Statistics were used to categorize school size. Fifteen-mile radius catchment areas were determined from randomly selected schools, and households with listed phone numbers were randomly selected within these catchment areas. Surveys were conducted if the household had a child in pre-kindergarten to 10th grade in the index school; selection of grade level was guided by the age span covered by the legislative act. If more than one child attended the index school, an index child was randomly selected to serve as the focus for the interview. Surveys included questions about school performance (grades); children's weight and height; weight-related and non-weight-related teasing; sociodemographic factors, including children's gender and parents' race/ethnicity; and other questions of interest to the overall evaluation. The current analyses utilize reports of school performance, teasing, child's weight and height, and sociodemographic characteristics in pre-adolescents (ages 13 years and younger).

Consistent with previous research (21–24), school performance was assessed using an item from the 2003 Centers for Disease Control and Prevention Youth Risk Behavior Survey (25) modified to apply to a parent respondent: "During the past 12 months, how would you describe your child's grades in school?" Response categories included "mostly As, Bs, Cs, Ds, or Fs". Weight-based teasing was determined by asking: "Do others tease, joke or make fun of your child because of his/her weight?" (response categories: yes/no). Non-weight based teasing was assessed by: "Do others tease, joke, or make fun of your child because of other reasons?" (response categories: yes/no). Using parent-reported height and weight for the index child, BMI was calculated as weight (kilograms)/height (meters)^2 and transformed into sex- and age-specific percentiles based on the Centers for Disease Control and Prevention growth charts (26). The University of Arkansas for Medical Sciences Institutional Review Board reviewed and approved this study.

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Data analysis

Data were weighted to be representative of families with children attending public schools in Arkansas, accounting for geographic regions, school levels and school sizes. Child weight status was categorized as not overweight (BMI $<85^{th}$ percentile) or overweight (BMI $\geq 85^{th}$ percentile). Race was classified as Caucasian or non-Caucasian due to small number of responders self-identifying as a racial group other than African-American (Table I). School performance was dichotomized into children who received "Mostly As" as reported by their parents and those who received "Mostly Bs" or lower grades, based on the infrequency of parents reporting grades of 'Mostly Cs' and lower. As anticipated, the child's age was strongly correlated with the school type. Therefore, to reduce concerns about multicollinearity, school type, but not age, was included in the main analyses.

Table I. Sample characteristics and teasing prevalence.

	n	%
Parent-reported	(N = 1 071)	
Child gender		
Male	574	53.4
Female	497	46.6
Parent race		
White	905	83.3
Non-White	166	16.7
African-American	123	11.4
Asian	5	0.7
Native American	12	1.1
Other	26	3.4
Child weight status		
Non-overweight	658	60.1
Overweight	199	19.1
Obese	214	20.7
Actual weight status categories of public school children in Arkansas*		
Non-overweight		62
Overweight		17
Obese		21
School level		
Elementary school	413	59.3
Middle school	658	40.7
Free and reduced lunch participation		
No	757	66.8
Yes	314	33.2
Grades		
Mostly As	728	71.4
Mostly B's or below	343	28.6
Mostly Bs	251	22.0
Mostly Cs	83	6.3
Mostly Ds	8	0.3
Mostly Fs	1	0.0
Weight-based teased	157	13.6
Teased for other reasons	254	23.8

*All public school students in the state of Arkansas with height and weight directly measured and body mass index for gender and age calculated.

Chi-square tests were used to determine unadjusted associations between the outcome and individual categorical covariates of interest (gender, school level, free-and-reduced lunch participation, and race). Logistic regression models were used to adjust for other covariates while examining the relationship between school performance, obesity, and weight-based teasing. Odds ratios and 95% confidence intervals (CIs) were used to describe the magnitude of the association, where present. Analyses were considered significant at $\alpha = 0.05$ level. All analyses were conducted using SAS, version 9 (SAS Institute Inc., Cary, NC).

Results

Demographic characteristics of the sample and the reported prevalence of teasing are reported in Table I. The children ranged from 4 to 13 years of age (Mean = 9.5 years old, Standard Error = 0.01). When examining the influence of demographic variables, weight status, and teasing on school performance, several significant relationships were found (Table II). Specifically, a significantly greater proportion of parents reported poorer school performance among: boys, children who participated in the free-and-reduced lunch program, middle school children, overweight children, and children who experienced weight-based or non-weight-based teasing. African-American and Caucasian parents reported similar proportions of children having poorer school performance.

Not surprisingly, a significantly greater proportion of children who were overweight experienced weight-based teasing than those children who were not overweight ($\chi^2[1, 1071] = 11.51$, $p < 0.001$); however, weight status was not associated with experiencing non-weight-based teasing ($\chi^2[1, 1071] = 0.35$, $p = 0.55$). Nonetheless, a greater proportion of the children who reported weight-based teasing also reported non-weight-based teasing ($\chi^2[1, 1071] = 4.64$, $p < 0.05$).

Overweight children's school performance by demographic variables

There were no significant interactions between weight status and the covariates. However, in further examining demographic differences in the relationship between overweight status and school performance, there was a marginally significant relationship between weight status and school performance for

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Table II. Parent-reported school performance (%), by weight status, gender, race, free-and-reduced lunch participation, school level, weight-based teasing, and non-weight-based teasing.

	Mostly A's		Mostly B's and below		
	n	%	n	%	p-value
Gender					
Boys	353	63.8	221	36.2	<0.0001
Girls	375	80.1	122	19.9	
Parent race					
White	635	72.7	270	27.3	0.14
Non-white	93	64.7	73	35.3	
Free-and-reduced school lunch					
No	557	76.7	200	23.3	0.0003
Yes	171	60.8	143	39.2	
School level					
Elementary school	318	77.1	95	22.9	0.0004
Middle school	410	63.1	248	36.9	
Child weight status					
Overweight	261	65.6	152	34.4	0.014
Non-overweight	467	75.3	191	24.7	
Weight-based teasing					
No	648	74.3	266	25.7	<0.0001
Yes	80	52.8	77	47.2	
Non-weight-based teasing					
No	587	74.2	230	25.8	0.025
Yes	141	62.5	113	37.5	

girls (OR = 1.72; 95% CI = 0.98, 3.01; $p = 0.06$), such that non-overweight girls were more likely to have better school performance than overweight girls. Weight status was not significantly related to school performance in boys (OR = 1.38; 95% CI = 0.85, 2.25; $p = 0.19$). When examining school level, non-overweight elementary school children were significantly more likely to have better school performance than overweight elementary school children (OR = 2.15; 95% CI = 1.22, 3.78; $p < 0.01$). Weight status was not associated with school performance among middle school children (OR = 1.27; 95% CI = 0.76, 2.13; $p = 0.36$). For those children who participated in the free-and-reduced lunch program, weight category was not a significant predictor of school performance (OR = 1.37; 95% CI = 0.72, 2.62; $p = 0.34$). The sample size for non-Caucasian children was not sufficient to perform similar analyses for race.

Multivariate models of school performance

As discussed above, weight category by itself was significantly associated with school performance, such that non-overweight children had significantly higher odds of better school performance (OR = 1.60; 95% CI = 1.10, 2.33; $p = 0.015$). After adding the weight category variable into the full multivariate model with covariates, weight category remained a significant predictor of school performance (Model 2: OR = 1.51; 95% CI = 1.01, 2.25, $p = 0.045$), and the covariates remained virtually unchanged.

However, with the addition of weight-based teasing (Model 3), the parameter estimate (beta) for weight category changed 24% and became non-significant (Model 3: OR = 1.39; 95% CI = 0.93, 2.10, $p = 0.11$), indicating a mediating effect of weight-based teasing on the relationship between weight category and school performance. Weight-based teasing was significantly associated with school performance, suggesting lower odds of better school performance among those who are weight-based teased (Model 3: OR = 0.44; 95% CI = 0.27, 0.74, $p = 0.002$). The association between other covariates and school performance remained consistent with findings from Model 1.

Discussion

Overweight children in this sample were more likely to have poorer school performance compared with non-overweight children, even after adjusting for demographic factors. Yet, with the addition of weight-based teasing to the adjusted model, weight status was no longer a significant predictor of school performance. In contrast, in the fully-adjusted model, weight-based teasing was a significant predictor of school performance, such that children who

Table III. Multivariate models predicting school performance.

	Model 1			Model 2			Model 3		
Variables	OR	95% CI	p-value	OR	95% CI	p-value	OR	95% CI	p-value
Gender	0.42	0.29–0.62	<0.0001	0.44	0.30–0.65	<0.0001	0.44	0.30–0.64	<0.0001
School level	2.08	1.41–3.07	0.0002	2.15	1.45–3.17	0.0001	2.12	1.44–3.13	0.0002
FRL-participation	0.47	0.32–0.73	0.0005	0.49	0.33–0.75	0.0008	0.51	0.34–0.77	0.0015
Race	1.30	0.79–2.13	0.30	1.30	0.80–2.12	0.29	1.34	0.82–2.20	0.25
Weight status				1.51	1.01–2.25	0.045	1.40	0.93–2.10	0.11
Weight-based teasing							0.44	0.27–0.74	0.0018

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experienced weight-based teasing were over 50% less likely to have good school performance compared with those children who did not experience weight-based teasing. These results point to the importance of considering psychosocial factors in the relationship with overweight status and school performance.

Several possible mediating factors have been previously proposed to explain the link between overweight and academic performance, including diet (3,5), physical activity (27), and most recently, psychosocial factors (5,6). In one recent study, researchers in Iceland (5) examined numerous variables to determine their relative impact on children's school performance. They found diet variables (fruit/vegetable consumption and intake of "bad" food, such as sweets, potato chips, french fries, hot dogs/hamburgers, or pizza) to be significant, although weak predictors of academic achievement. In addition, they reported that the physical activity variable became non-significant when the psychosocial variable of self-esteem was added to the model. These investigators also found depressed mood to be a significant predictor of school performance. Given these findings and the findings from the current study, further examination of psychosocial variables, including weight-based teasing, on school performance in overweight children may be beneficial.

The results of the current study suggest that overweight girls may experience greater negative school performance-related consequences than boys. Although this finding is consistent with previous research (4,17), the relationship was only marginally significant in the current study, which may have been due to decreased power to detect differences in this secondary analysis, particularly as parents of girls were significantly more likely, overall, to report better school performance than parents of boys. Studies of psychological factors have found a similar significant differential impact for overweight girls on depressive symptoms (28) and low self-esteem (29) compared with overweight boys. Considering the impact of weight-based teasing on school performance in the current study together with the greater prevalence of weight-based teasing among girls in previous research (8,9), it may be particularly important to consider the impact of psychological factors, including weight-based teasing, on school performance in overweight girls.

Previous research has not examined the difference in school level on the impact of overweight status and school performance. In the current sample, although weight status was not a significant predictor of school performance among middle school children, non-overweight elementary school children were significantly more likely to have better school performance than overweight elementary school children. There are several possible explanations for the stronger findings among younger children than those in middle school. First, our sample included a smaller proportion of parents of middle school children (40.7%) than parents of elementary school children, and parents of middle school children were significantly less likely to report that their children had "Mostly A's" (63.1%) than parents of elementary school children (77.1%). A combination of these sample characteristics may have reduced the power to detect differences among the middle school children, as the trend was in the expected direction. Alternatively, if we assume that weight-based teasing does negatively affect school performance; older overweight children may be more adept at coping with weight-based teasing. A qualitative study of overweight black and white high school girls (7) found that some reported that they had learned to manage hurtful situations, such as teasing about their weight, as they got older and that they became better able to ignore the perpetrator. It is also possible that if weight-based teasing is more normative (11,13) among older children, it may have less impact on school performance. The role of age or school level (primary or secondary) has not been considered in other research exploring weight and school performance, but the further exploration of age and school level appears to be warranted in future research.

Future research may also wish to consider psychosocial variables, such as depression, anxiety, self-esteem, and weight-based teasing, and the interaction between these variables, in addition to behavioral factors, such as diet and physical activity, when examining the impact of obesity on school performance. Recent studies (30,31) have utilized a 23-item measure of health quality of life that may be useful in describing the physical, emotional, social, and school functioning impact of weight status among children. Research to clarify any interplay between weight-based teaching and other psychological concerns that might be precipitated by teasing (e.g., depression, low self-esteem, anxiety) and impact school performance among obese children would be particularly enlightening because effective interventions that target these concerns exist (32–34) and may have the potential to reduce the impact of weight status on school performance. In addition, it may be beneficial to examine the mechanisms by which weight-based teasing may influence school performance. For example, absenteeism may play a role; overweight children have been found to be at greater risk for school absenteeism than their normal weight peers (35), and this may reflect an effort to avoid being teased, a wish to avoid physical education classes, or greater propensity to illness, but has

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the untoward consequence of putting the child at academic disadvantage.

It is important to consider several limitations when interpreting the results of the current study. First, the survey in this study was designed to evaluate many aspects of a broad initiative, so both weight-based teasing and school performance were assessed as a single item. Therefore, future studies examining the impact of weight-based teasing on school performance may benefit from including a more comprehensive assessment of these variables, including further information about the frequency, perpetrator(s) (e.g., teacher, peer, parent), and type (e.g., relational, verbal, physical, sexual) of weight-based teasing. Second, the uncertainty regarding accuracy of parental reports about their children is a serious limitation. This concern extends to the height, weight, weight-based teasing, and school performance variables used in the analyses. In a recent study, 68% of parents were found to underestimate their child's weight, while only 41% of parents were found to estimate correctly or overestimate their child's weight (36). However, the parental reports of weights and heights used in our study to calculate BMI result in distributions in our sample that closely match statewide BMI data calculated from direct weight and height measurement in Arkansas schools, suggesting little, if any, systematic under- or over-reporting in the overall sample. Parental report of weight-based teasing of their children has been raised as being a limitation in previous studies as well as in the current investigation (12). The accuracy of parental report of grades is unknown, although there is no reason to believe that the accuracy of parental report of grades would differ based on weight status. However, the skewed distribution of higher grades reported by parents would suggest that more objective measures of academic performance should be included in future study of this important research question. Third, the sample sizes of non-Caucasian groups in the present sample are too small to allow any reasonable power for statistical analyses. A larger sample size or over-sampling methods to ensure larger samples of non-Caucasians would allow examination of the relationships between overweight status, school performance, and weight-based teasing experiences across racial/ethnic groups. Finally, as the data in the present study were cross-sectional, causality cannot be determined.

Conclusion

Despite these limitations, the current study brings attention to important factors that merit consideration when examining the impact of pediatric overweight on school performance. As the number of overweight and obese children continues to increase dramatically, a greater understanding of the social and psychological impact of childhood overweight will be important not only to address the welfare of individual children but also to minimize the wide range of negative consequences to the entire generation. Childhood overweight confers not only negative health consequences but also strong likelihood of negative economic (37,38) and psychosocial outcomes (39–41). Poor academic achievement among overweight children may be one of the pathways by which early obesity impacts the economic and social future of children. The identification of psychological variables, such as weight-based teasing, that may mediate these associations, offers promise for successful interventions to mitigate the negative impact of childhood overweight on school performance, and may enhance later social functioning on broader dimensions.

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QUESTIONS AND ANSWERS

NOVEMBER 17, 2009

Senate Committee on Agriculture, Nutrition & Forestry
Reauthorization of U.S. Child Nutrition Programs: Opportunities to Fight Hunger and Improve Child Health
Questions for the record
Secretary Tom Vilsack
November 17, 2009

Senator Saxby Chambliss

1) Secretary Vilsack, you recommend "national baseline standards for all foods sold in elementary, middle, and high schools" in your testimony. Do you propose establishing regulations that would evaluate each food and beverage item individually (thus creating a list of allowable/disallowable items) or would you instead focus on evaluating the entire selection of foods and beverages available to ensure they meet a healthy standard as is currently done to evaluate compliance in the National School Lunch and Breakfast Programs?

2) Would you enforce these standards by imposing financial penalties on schools? How would you ensure schools comply with the new standards?

3) In recent years the Department of Defense Fresh Program has made changes to its procurement and distribution process. There have been concerns raised about the result of the changes, such as higher prices and inconsistent deliveries. Is USDA satisfied with DoD's record of performance in the Fresh Program? Is USDA aware of any periods in which states or school districts did not receive services? Has USDA received reports of imposed new costs, such as additional delivery fees, on school districts? Please provide any additional comments you may have in regard to the accuracy of these reports.

4) Regarding WIC, a witness representing food retailers on the 2nd panel commented that the WIC food package has grown from 500 approved food items to approximately 12,000 due to implementation of the new food package. The witness stated the need for a centralized database that listed all the eligible products to help retailers meet their obligations as WIC vendors, especially those that operate in multiple states. Has USDA begun to develop a centralized database that lists all eligible food products under the program? If so, what is the status of the project? If not, what are the obstacles in developing or completing such a database?

Senator Tom Harkin

1. Hunger and Food Insecurity

As mentioned in your testimony and in a number of news reports yesterday, the Department of Agriculture's most recent report on hunger and food insecurity in the United States found that 49 million Americans lacked a dependable supply of food last year, which is the highest figure since such numbers have been measured. Nearly 17 million children lived in households that sometimes ran short of food last year – up from 12 million in the year before.

And the number of children who were outright hungry at some times in 2008 jumped to nearly 1.1 million from about 700,000 the year before.

Question: Would you please clearly spell out for the record in some specific detail what you and the Department of Agriculture, as well as the Administration as a whole, propose to do and plan to do to deal with what is a very sobering, if not even shocking, increase in the number of Americans, especially children, who lack sufficient food and are indeed outright hunger at times?

In addition, as you note in your testimony, the quality and nutritional value of the diets that children in our nation typically consume fall far short of optimal, recommended benchmarks.

Questions: How can we fight hunger and food insecurity while also greatly improving the nutritional quality and healthfulness of the food and beverages America's children consume, especially at school? That is, what policies do you see as promising and what would you propose to deal effectively with both of these problems, and are there particular policies that will address both problems together?

2. Promoting Effective Steps to Address Food Insecurity, Hunger, and Poor Nutrition

Considering how challenging it is to obtain additional funding in the budget for new initiatives in child nutrition, such as those referred to in the previous questions, it seems worthwhile to consider policies that would focus and target whatever additional funding we can muster in order to enhance its efficiency and effectiveness in improving the nutrition of our nation's children.

Question: Would you provide for the Committee your views, and those of the Administration, regarding incentive-based or performance-based schemes in which local schools may receive additional reimbursement if they more effectively reach and serve the needs of children who are hungry or lack dependable food and improve the nutritional quality and healthfulness of the foods and beverages that students consume at school?

Senator Michael Bennet

1) School Breakfast

When children eat breakfast at school, it reduces hunger, improves nutrition and increases academic achievement. School breakfast participation remains too low, reaching less than half of the low-income children who eat lunch at school every day nationally. In Colorado, less than 38 students out of 100 who eat a free/reduced lunch also participate in school breakfast. Many of these children arrive at school not ready to learn and unable to concentrate, because they have not eaten a morning meal. Universal, in-classroom breakfast programs are proven to bring more children into the program. What is the USDA doing and can we in Congress do to enable more low-income children receive breakfast at school each day?

2) *Direct Certification*

Automatically enrolling children from low-income families for free school meals based on participation in other means-tested programs is an important component of making these programs do what they're supposed to do – help all the kids who need the help. I know you support "direct certification" as a better way to get qualifying kids the help they need I am concerned, however, that your recent report on state direct certification performance shows that as many as 3.5 million children who could have been directly certified were not, and a good portion of those children may have missed out on sponsored meals.

Congress has already taken steps to try to improve direct certification rates, most recently providing $22 million in the agriculture appropriations bill for grants to improve direct certification. There are more steps I hope will be included in the child nutrition reauthorization legislation. But in the meantime, I would like to hear what USDA is doing to improve state performance. 48 states don't yet directly certify 95 percent of the children in a household that receives food stamp benefits. Are you assisting states to improve? Obviously, these numbers are extremely underwhelming. Are you sharing with them best practices that support improvement efforts? I would hope that the federal government could be a clearinghouse for good ideas.

3) Question on School Wellness Policies

In 2008, the Colorado state legislature passed a bill that allowed state Comprehensive Health Education funds to support coordinated school health programs in school districts, which are designed to improve nutrition and physical activity for students in public schools . While School district wellness policies continue to be implemented across the state, but some districts have no committees and some of those that do lack financial support, consistent input from community members, and are not evaluated for their effects on student wellness.

Colorado has a new school accountability law (SB 163) that requires public schools to report on their health and wellness programs - while the State Board of Education is working out what those are to include, some options include existence of a wellness committee, recess and a school nurse.

Secretary Vilsack, would you please talk a little bit about what the USDA is doing to provide assistance to states, districts and schools as they work to develop and implement the Wellness Policies required in the 2004 child nutrition reauthorization?

Thank you Mr. Secretary for taking the time to testify before the Senate Agriculture Committee, and I look forward to working with you on the upcoming reauthorization of USDA's Child Nutrition Programs. The Houston Independent School District (HISD) is the 7th largest school district in the nation, and I anticipate working very closely with them on school nutrition standards, menu planning, meal reimbursements, commodity allocations, and overall nutrition education to improve the health of Texas school children. I appreciate this opportunity to ask you a few questions on behalf of the district and the Texas children they educate and feed. I look forward to your reply and appreciate your time and consideration.

1) Mr. Secretary, the Agriculture Committee wrote legislation last year to create uniform national standards for all foods sold in schools. Does the Administration share the goal of a single nationwide nutrition standard?

2) If so, would the Administration favor phasing in new standards in a manner that allows existing school food supply chains adequate time to respond to changes?

3) Recognizing the nutrition achievements that have already been made by some states, such as Texas, in the absence of nationwide standards, would the Administration favor exempting or otherwise working with such states to make additional improvements to state-level standards?

4) Given the increasing cost of transportation, has the USDA considered incorporating local or regional produce and other foods to support our school children while making an impact on our local and state economies?

Senator Robert P. Casey, Jr.

1. I recently launched a tour across Pennsylvania for the exhibit Witnesses to Hunger, a photography project documenting hunger and poverty. This project began at Drexel University in Philadelphia with 40 women capturing their daily struggle with hunger with digital cameras. In June, I had the honor of bringing this exhibit to Washington. I cannot begin to describe how moved I was to see the photographs taken by these women, and hear their stories. Their bravery and rare courage in sharing the struggles they face to provide a safe, nurturing home for their children will always stay with me. These mothers who brought Witnesses to Hunger to life are a constant reminder that the programs we in Congress advocate for, and the new initiatives we develop, can have a real impact on people's lives. Through my conversations with the women participating in Witnesses to Hunger, I have learned a great deal about the day-to-day aspect of the programs we are discussing. Application to these programs can be overly burdensome for some families. I believe that we need to simplify and modernize the application for these programs. For this reason, I introduced the Paperless Enrollment for School Meals Act, modeled after the Philadelphia pilot program which provided free lunch to all kids in schools that had over 75% of the students eligible for free lunches. I applaud your Department's efforts to enable Direct Certification. I was wondering if you could speak a bit about expanding the idea behind direct certification and illuminate how you envision

this idea playing out ten or even twenty years down the road. Also, I'd like to hear your thoughts on how programs such as the Philadelphia paperless enrollment pilot and direct certification of children receiving food stamps to be automatically enrolled in the school lunch program will help work toward the Administration's goal to end child by 2015?

2. In your testimony, you mentioned the summer food service program and the need to improve access beyond the 2.2 million children currently served. Do you have ideas as to how to best do this? How do we serve children in rural areas or areas where it is difficult to congregate them at a feeding site?

3. You also mentioned facilitating relationships between farms and schools. The issue is finding ways we can better support that connection. What sort of approaches is the Farm to School Tactical Team investigating? The Fay-Penn Economic Development Council in Pennsylvania has developed a locally grown food initiative, and I invite you to examine this concept. What are the biggest barriers to local farm participation in nutrition programs such as school lunch?

Senator Sherrod Brown

1. By some estimates, 1.5 million children eligible for the school lunch and breakfast program are slipping through the cracks. And as we saw in today's papers, 1 out of 5 households with children were food insecure at some point last year. It's unacceptable that so many children in a country as prosperous as ours aren't getting the meals they need to succeed.

What is USDA working on to improve these numbers? What role can increased use of direct certification play in making sure that the children who need these meals are actually getting them?

2. I've been happy to hear of your support for direct certification. However, I am concerned that in USDA's most recent report on the states direct certification performance, as many as 3.5 million children who could have been directly certified were not, and a good portion of those children may have missed out completely on free meals.

I appreciate the efforts made this year to improve direct certification rates and I am hopeful that we take further steps in the child nutrition reauthorization legislation. But in the meantime, what is USDA is doing to improve state performance? Are you meeting with the 48 states that don't yet directly certify 95 percent of the children in household receiving food stamp benefits? What support are you providing to share best practices and support improvement efforts?

3. The school lunch and breakfast programs are an indispensable resource for the millions of children in this country who need a healthy breakfast and lunch each school day. I think we all agree that we want to make it easier for low-income children to get access to these meals. The Hunger Free Schools Act, a bill that I introduced with Senators Casey and Bennet,

includes a number of provisions that would take steps to ensure that poor children are automatically enrolled for free school meals.

One of the provisions in the bill would make it easier for schools in high poverty areas to serve free meals to all children who attend their schools. At Harvey Rice Elementary in Cleveland, 99 percent of the students qualify for free or reduced price meals—and it's just one of the hundreds of schools in Ohio where over 90 percent of the students are eligible for free or reduced lunch. We know that the kids in these neighborhoods are overwhelmingly poor. We know that these schools face extraordinary challenges. I think that we should make it easier for these schools to serve their students by eliminating the application and paperwork processes that are fundamentally a waste of time.

Our bill includes an option that would allow schools serving high-poverty areas to offer free meals to all students and be reimbursed based on direct certification rates.

By our measure, this bill would allow thousands of schools serving the highest share of poor children to be truly hunger free schools — meaning they could serve free breakfasts and lunches to all their students. Can you tell us what you think about this concept?

Senator Kirsten Gillibrand

1) I am pleased to see the administration's commitment to ending childhood hunger by 2015. However, in addition to ensuring that children are able to get a sufficient quantity of food, I am also particularly interested in ensuring that that food is of the highest quality. I will continue to be an advocate for increased funding for the bill in order to provide our children have access to more fresh fruits, vegetables, whole grains and unprocessed meats. Can you please comment on initiatives the USDA is taking to include more whole foods in the Child Nutrition Programs, and what steps the committee can take to build on those efforts? Can you also please talk about what actions the USDA is taking to help schools increase transparency about what items are currently being served to students, so parents can be more fully involved in the menu planning and development?

2) In an effort to combat the obesity epidemic, there are some commonsense measures we can take to improve the nutritional quality of the foods our children are consuming at school. Following the example of school districts like New York City, simple administrative guidelines setting reasonable standards on vending machines and a la carte items can ensure our children are eating healthy and nutritious meals at school. What sort of standards would you put into place if given the authority by S.934, the Child Nutrition Promotion and School Lunch Protection Act?

3) Studies have shown that a good breakfast promotes academic achievement and helps children maintain a healthy weight. However, school breakfast remains the forgotten meal, with participation far lower than the lunch program. Along with my colleagues Senator Kohl and Senator Feingold, I have worked on legislation that would give school districts grants to encourage the development of innovative new ways of delivering school meals to ensure that this vital component of the program is properly utilized. Can you please comment on this proposal?

4) The National School Lunch Program still relies primarily on inefficient paper forms for determining eligibility for free and reduced price meals. Labyrinthine paperwork should never be a barrier to children having access to the meals they deserve. Can you please comment on the Hunger Free Schools Act, which would use data from other benefit programs to automatically certify students for the school meal programs, as well as allow certain districts to use census data and other demographic information to administer their school meal programs?

5) Feeding programs across the nation have come to depend on the market clearing federal commodity programs for a significant portion of their school meal budget. However, certain products retain formulations that do not further the need to provide appropriately low-fat, low-sugar, low-sodium products to our programs. Can you please comment on the appropriateness of setting FNS's guidelines for the school meal programs as the nutritional baseline for products being purchased by the USDA's commodity programs? The USDA is a massive purchaser of products and can use its clout to positively influence the formulation of products nationally.

6) New York State remains a high-cost state that is chronically underfunded in programs that use the federal poverty line as a metric for eligibility. New York State gets back 79 cents per dollar it sends to Washington D.C. Especially in our downstate communities surrounding New York City, the federal poverty line leaves many needy families out of the vital School Lunch Program.

   I have introduced legislation that would use HUD's Fair Market Rent as a means to designate counties across the United States as high-cost, and merge the free and reduced categories into one free category those areas. This would expand the targeted treatment states like Alaska and Hawaii already receive. Can you please comment on this idea?

7) We know that the first five years of life are critical for brain development and establishing later success in life. Good nutrition is absolutely key for young children, and many infants and toddlers in New York and across the country spend a considerable portion of their day in child care settings. What does USDA think about the importance of Child and Adult Care Feeding Program to ensuring that these children get a good

start? What are USDA's plans to ensure that Child and Adult Care Feeding Program provides the most support to as many children and providers given the increase in childhood hunger?

8) Given the important role that individual districts have played in creating higher standards for the School Meals Program, I strongly support maintaining these districts' ability to set standards that are higher than the national standard. I would oppose any federal standards which preempt more stringent local standards. What are your thoughts on this issue?

Senate Committee on Agriculture, Nutrition & Forestry
Reauthorization of U.S. Child Nutrition Programs: Opportunities to Fight Hunger and Improve Child Health
Questions for the record
Secretary Tom Vilsack
November 17, 2009

Senator Saxby Chambliss

1) Secretary Vilsack, you recommend "national baseline standards for all foods sold in elementary, middle, and high schools" in your testimony. Do you propose establishing regulations that would evaluate each food and beverage item individually (thus creating a list of allowable/disallowable items) or would you instead focus on evaluating the entire selection of foods and beverages available to ensure they meet a healthy standard as is currently done to evaluate compliance in the National School Lunch and Breakfast Programs?

Answer: The National School Lunch Program regulations prohibit the sale of foods of minimal nutritional value, such as carbonated beverages, hard candy and water ices, in the foodservice area during meal periods. Beyond this, USDA does not have authority to regulate the sale of other foods available to students outside of the school meal programs during the regular meal service (competitive foods). State agencies or local school districts may choose to set their own requirements for competitive foods.

If given authority to regulate all competitive foods , USDA would convene a group of key stakeholders (including schools and industry representatives) to seek their input. Subsequently, based on statutory direction, stakeholders' input and science-based nutrition standards , we would issue a proposed regulation that would establish baseline nutrition standards to define the foods that would be acceptable outside of the school meal programs. Stakeholders and the public would have ample opportunity to comment on any proposed regulation.

2) Would you enforce these standards by imposing financial penalties on schools? How would you ensure schools comply with the new standards?

Answer: Any baseline nutrition standards would be developed through rulemaking and would include enforcement provisions. Generally, our first approach to facilitate compliance with program requirements is technical assistance. USDA would provide training and ongoing technical assistance to the State agencies that are responsible for day to day administration of the school meal programs. In turn, the State agencies would provide technical assistance and training to their schools to help them comply with the new baseline nutrition standards. State agencies would also monitor compliance with the new requirement through the current administrative reviews of the school meal programs.

3) In recent years the Department of Defense Fresh Program has made changes to its procurement and distribution process. There have been concerns raised about the result of the

changes, such as higher prices and inconsistent deliveries. Is USDA satisfied with DoD's record of performance in the Fresh Program? Is USDA aware of any periods in which states or school districts did not receive services? Has USDA received reports of imposed new costs, such as additional delivery fees, on school districts? Please provide any additional comments you may have in regard to the accuracy of these reports.

Answer: Through the Department of Defense Fresh Fruit and Vegetable Program, USDA has been able to offer schools and Indian Tribal Organizations a wider variety of fresh produce than would normally be available through USDA purchases. Over the years, States have been generally pleased with the quality, condition, and appearance of the product and the extensive selection offered.

DoD has been transitioning to a new business model to accommodate the changes that resulted from the Defense Commissary system taking over its own produce procurement. Under the new business model, DoD has closed produce buying offices that were used to take orders from schools, States, and Indian Tribal Organizations, and replaced them with a new system of prime vendor contracts. DoD has implemented this system in the majority of States, representing over 90 percent of schools.

It is our understanding that DoD has experienced some transition issues as a result of the move to prime vendor contracts. Some difficulties are to be expected in the implementation of any new system, and USDA has met with DoD on this issue. DoD has met with States to resolve problems as they have arisen, and we expect improvements with the DoD Fresh Program. DoD has assured us that they continue to remain committed to providing our customers access to fresh, wholesome, fruits, and vegetables through USDA's nutrition assistance programs.

4) Regarding WIC, a witness representing food retailers on the 2nd panel commented that the WIC food package has grown from 500 approved food items to approximately 12,000 due to implementation of the new food package. The witness stated the need for a centralized database that listed all the eligible products to help retailers meet their obligations as WIC vendors, especially those that operate in multiple states. Has USDA begun to develop a centralized database that lists all eligible food products under the program? If so, what is the status of the project? If not, what are the obstacles in developing or completing such a database?

Answer: We are currently piloting the National WIC Universal Product Code (UPC) Database system that was authorized in the Child Nutrition Reauthorization Act of 2004. The database was designed with input from State agencies, industry and WIC food vendors that support the WIC Program. The National UPC Database is intended to be a repository of WIC-eligible foods listed by the universal product codes (packaged foods) or price look-up codes (fresh fruit and vegetables). Once fully operational, the database may be used by each State agency to manage an electronic list of the authorized foods and distribute this as needed to the retail vendors authorized by the State agency. These electronic lists are distributed to authorized WIC retail vendors in order to support WIC Electronic Benefits Transfer delivery. The pilot is just beginning and we plan to assess the level of support and technical resources it will require to maintain.

Senator Tom Harkin

1. Hunger and Food Insecurity

As mentioned in your testimony and in a number of news reports yesterday, the Department of Agriculture's most recent report on hunger and food insecurity in the United States found that 49 million Americans lacked a dependable supply of food last year, which is the highest figure since such numbers have been measured. Nearly 17 million children lived in households that sometimes ran short of food last year – up from 12 million in the year before. And the number of children who were outright hungry at some times in 2008 jumped to nearly 1.1 million from about 700,000 the year before.

Question: Would you please clearly spell out for the record in some specific detail what you and the Department of Agriculture, as well as the Administration as a whole, propose to do and plan to do to deal with what is a very sobering, if not even shocking, increase in the number of Americans, especially children, who lack sufficient food and are indeed outright hunger at times?

Answer: I share your concern that hunger is a critical problem in our country and I have made the ambitious goal of eliminating hunger among children a top priority since I began my tenure at USDA.

The recent economic downturn and dislocations have undoubtedly made the food security situation worse for many. The fundamental cause of domestic food insecurity and hunger is household poverty – the lack of adequate resources to address basic needs such as food, shelter and health care. While USDA programs provide a safety net that improves access to food to those with critical needs, addressing the causes of childhood hunger requires a broad strategy to improve economic opportunities and increase incomes.

The Administration has worked with Congress on an aggressive program of actions to address poverty through a broad expansion of economic opportunity – creating or saving about 3.5 million jobs through the American Recovery and Reinvestment Act (ARRA) while making long-term investments in health care, education, energy, and infrastructure, providing tax relief for working families and working to promote affordable housing and vibrant neighborhoods and communities. As a central part of this effort, we strengthened USDA's nutrition assistance programs with a substantial increase in SNAP benefits and food bank funding, and infrastructure investments in all of the major programs.

But we know that more must be done to meet the challenge before us, and I have directed my team to develop a plan to enhance the impact of USDA programs aimed at preventing childhood hunger. The reauthorization process represents a critical opportunity for action to reduce barriers and improve participation. For many children in our programs, School Lunch and Breakfast represents the only healthy food that they eat all day. We must work to ensure access to food for children when and where they need it, particularly during the "gap periods," when we know children struggle to receive the nutrition they need - summer months, during breakfast, and in after-school environments. Some key priorities in this area include:

- *Improving access to food in the summer.* Participation in USDA meals programs during the summer, on average, is less than 20% of the participation level on a typical school day, and food insecurity among children tends to increase during the summer. We must find new methods to encourage summer service providers to participate in the Summer Food Service Program (SFSP), and to operate for longer during the summer. We also must find alternative means to get nutritious food to children when school is not in session, building on the $85 million provided for this purpose by Congress in the FY 2010 agriculture appropriations bill.

- *Expanding the School Breakfast Program.* Healthy days begin with healthy breakfasts. Many teachers report that they can tell which of their children had healthy breakfasts and which did not. 100,000 schools offer lunch, and 88,000 offer breakfast. But average daily participation in breakfast is far lower than in lunch – only about 11 million on an average school day, compared to 31 million for lunch. We must support efforts to increase the number of schools offering breakfast and the participation of eligible children in the program, and look for ways to support improvements in the nutritional quality of school breakfasts as well.

- *Support and promote direct certification* efforts that automatically enroll eligible children in school meals. The Department will use the $22 million in Direct Certification Grants recently approved in the agriculture appropriations bill to encourage States to enhance their existing direct certification systems with new technologies or with ideas borrowed from the most successful States.

- *Testing innovative approaches to improve school meals* to better address hunger among children, including modifications to counting and claiming processes in very low-income areas.

- *Providing support for communities and States committed to ending the scourge of hunger.*

Beyond these priorities, I intend for USDA to lead an effort that will engage the full range of Federal partners and other key stakeholders, and build on the proven strength of the nutrition assistance programs as a safety net that can prevent hunger among the children and low-income people they serve. I look forward to collaborating with you to advance our shared goals.

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Question: In addition, as you note in your testimony, the quality and nutritional value of the diets that children in our nation typically consume fall far short of optimal, recommended benchmarks.

How can we fight hunger and food insecurity while also greatly improving the nutritional quality and healthfulness of the food and beverages America's children consume, especially at school? That is, what policies do you see as promising and what would you propose to deal effectively with both of these problems, and are there particular policies that will address both problems together?

Answer: Making school meals and other Child Nutrition Programs work for America's families requires that we address both problems. We can improve access to meals while also making every school a place where nutrition and learning shape the food offered by improving the quality of meals, eliminating foods that do not support healthful choices, and expanding physical activity opportunities. Investing in meal quality and access to these critical programs will help support the capacity of our young people to learn and acquire the tools necessary to become the leaders of tomorrow.

Our reforms must work to ensure access to nutrition assistance for children, when and where they need it, particularly during the "gap periods," when we know children struggle to receive the nutrition they need – summer months, during breakfast, and in after-school environments. Key policies in this area include finding new methods to get nutritious food to children when school is not in session, expanding participation in the School Breakfast Program, and using innovative approaches such as to direct certification and modifications to counting and claiming processes in very low-income areas to improve access.

At the same time, we must do everything we can to improve the nutritional quality of school meals and the health of the school environment. On school days, participating children consume as many as half of their calories at school. The Institute of Medicine, under contract to USDA, recently completed its expert recommendations to improve school meals, which pave the way for the first major revision of the nutrition standards for school meals since 1995. We are working now to prepare a regulatory proposal to make these improvements a reality in schools across the nation.

The challenges of helping kids stay healthy extend beyond reimbursable school meals. Children are subject to innumerable influences in their environment. As they develop preferences and practices that will last a lifetime, their choices are shaped by their surroundings—at home, in school, and in their wider community. The school nutrition environment is a powerful influence in this regard. Accordingly, the Administration recommends setting higher standards for all foods sold in school, and related policies and programs to ensure that the school environment is a positive influence on children's diets, their physical activity choices, and their health.

2. Promoting Effective Steps to Address Food Insecurity, Hunger, and Poor Nutrition

Considering how challenging it is to obtain additional funding in the budget for new initiatives in child nutrition, such as those referred to in the previous questions, it seems worthwhile to consider policies that would focus and target whatever additional funding we can muster in order to enhance its efficiency and effectiveness in improving the nutrition of our nation's children.

Question: Would you provide for the Committee your views, and those of the Administration, regarding incentive-based or performance-based schemes in which local schools may receive additional reimbursement if they more effectively reach and serve the needs of children who are hungry or lack dependable food and improve the nutritional quality and healthfulness of the foods and beverages that students consume at school?

Answer: Childhood obesity is an epidemic condition across the Nation, and the planned improvements to the school meal programs are a key strategy to reshape the nutrition environment for our children. The Institute of Medicine's recent recommendations to improve school meals pave the way for the first major revision of the nutrition standards in these programs since 1995. It's worth noting that the Institute of Medicine identified the need to provide additional federal support in order for schools to meet these higher standards and called for an increase in reimbursement rates and in the form of capital and technical assistance. We will use these recommendations to develop a regulatory proposal for public consideration and comment in the coming months.

To encourage the changes schools will need to make to meet new requirements, USDA supports providing performance-based reimbursement rate increases that would be made contingent on schools' meeting specific nutritional improvements. This approach would provide a strong incentive for schools to achieve the needed improvements to meal quality in support of the long-term health of our Nation's children.

Senator Michael Bennet

1) School Breakfast

When children eat breakfast at school, it reduces hunger, improves nutrition and increases academic achievement. School breakfast participation remains too low, reaching less than half of the low-income children who eat lunch at school every day nationally. In Colorado, less than 38 students out of 100 who eat a free/reduced lunch also participate in school breakfast. Many of these children arrive at school not ready to learn and unable to concentrate, because they have not eaten a morning meal. Universal, in-classroom breakfast programs are proven to bring more children into the program. What is the USDA doing and can we in Congress do to enable more low-income children receive breakfast at school each day?

Answer: We know that eating a good breakfast can have a positive effect on a child's ability to learn and his or her academic performance. For more than thirty years, the School Breakfast Program (SBP) has played an important role in Federal, State and local efforts to advance children's health and nutrition by offering students a healthful breakfast option in the schools where it operates.

The Department has partnered with program advocates to develop several projects to promote the SBP. We recently broadcast a webinar on SBP resources and success stories and have posted that on our public website. In addition, we have developed a SBP Toolkit designed to be an online resource to help promote and expand the SBP as a way of supporting positive nutrition outcomes for children. These resources are designed to be customized for use by schools and other stakeholders. Information sheets, letters, marketing materials and PowerPoint files may be modified and used by schools and other stakeholders interested in helping more students benefit from the SBP.

USDA continues to expand efforts to enroll more schools in the program and to increase student participation. A variety of factors influence school and student participation in the SBP, including the hours of operation of the breakfast program, staff availability for the preparation and service of breakfast, and other challenges. However, schools are finding innovative ways to provide access to breakfast for more students—ways that fit the particular needs of the student body. For example, some schools serve breakfast on the bus, grab-'n'-go breakfast, breakfast in the classroom or after first period. We applaud and support these efforts.

We look forward to working with Congress to ensure that the Administration's goals to increase participation rates and program access are part of the child nutrition reauthorization.

2) Direct Certification

Automatically enrolling children from low-income families for free school meals based on participation in other means-tested programs is an important component of making these programs do what they're supposed to do – help all the kids who need the help. I know you support "direct certification" as a better way to get qualifying kids the help they need. I am concerned, however, that your recent report on state direct certification performance shows that as many as 3.5 million children who could have been directly certified were not, and a good portion of those children may have missed out on sponsored meals.

Congress has already taken steps to try to improve direct certification rates, most recently providing $22 million in the agriculture appropriations bill for grants to improve direct certification. There are more steps I hope will be included in the child nutrition reauthorization legislation. But in the meantime, I would like to hear what USDA is doing to improve state performance. 48 states don't yet directly certify 95 percent of the children in a household that receives food stamp benefits. Are you assisting states to improve? Obviously, these numbers are extremely underwhelming. Are you sharing with them best practices that support improvement efforts? I would hope that the federal government could be a clearinghouse for good ideas.

Answer: Direct certification ensures that eligible children are properly and promptly certified for the benefits they are entitled to receive. USDA supports and seeks to expand and improve the direct certification process as it is a highly effective tool that improves access to school meals for needy children, removes the burden from their families of completing and submitting applications and reduces the paperwork burden on schools. Direct certification also supports program integrity by accurately targeting benefits to eligible children. To support this effort, Congress provided $9 million in the 2004 Reauthorization Act to support states in their efforts to improve direct certification, especially as mandatory direct certification with the Supplemental Nutrition Assistance Program (SNAP) was also required under that Act.

As you mentioned, the recent USDA report to Congress mandated by the 2008 Farm Bill found that a number of otherwise eligible children are still not being directly certified and may not be receiving free meals. The first report for School Year 2007-2008 found 67 percent of school districts directly certified some SNAP participant children; that number rose to 78 percent of school districts in the School Year 2008-2009 report. Further, these districts enroll 96 percent of all children in participating schools.

The annual report to Congress is a useful tool for states to determine how effective their direct certification methods relative to other states, and for FNS to determine areas that may require additional training and technical assistance, and grant funding. The most recent report includes a description of direct certification systems across the country, and will help us to promote best practices across states that could assist with making direct certification more effective.

Targeting the grant funds provided by the Fiscal Year 2010 Agriculture Appropriations Act will be vitally important and this report will be a key tool in doing so. While these grants are earmarked for states that are not adequately implementing direct certification procedures, we are looking at best practices reported by the most successful states to determine how to structure the grant solicitation as well as our technical assistance efforts. We will continue to assist States in their development of direct certification systems tailored to their particular circumstances and aimed at bringing more eligible children into the child nutrition programs.

3) Question on School Wellness Policies

In 2008, the Colorado state legislature passed a bill that allowed state Comprehensive Health Education funds to support coordinated school health programs in school districts, which are designed to improve nutrition and physical activity for students in public schools. While School district wellness policies continue to be implemented across the state, but some districts have no committees and some of those that do lack financial support, consistent input from community members, and are not evaluated for their effects on student wellness.

Colorado has a new school accountability law (SB 163) that requires public schools to report on their health and wellness programs - while the State Board of Education is working out what those are to include, some options include existence of a wellness committee, recess and a school nurse.

Secretary Vilsack, would you please talk a little bit about what the USDA is doing to provide assistance to states, districts and schools as they work to develop and implement the Wellness Policies required in the 2004 child nutrition reauthorization?

Answer: Schools have been required to have local wellness policies in place since the start of the 2006-2007 school year. When the 2004 Reauthorization Act established the wellness policy requirement, it did not provide the Department with authority to issue regulations governing wellness policies, nor the authority to evaluate policies or enforce their implementation.

USDA received $4 million in FY 06 for use in providing technical assistance to State agencies, local education agencies (LEAs), and school food authorities, with the funding to remain available until September 30, 2009. USDA made half of this funding available in the form of noncompetitive grants to State agencies to conduct training and technical assistance to LEAs on establishing, implementing and measuring implementation of the local wellness policies. The remainder was used to provide State agencies, LEAs, and school food authorities with technical assistance and guidance materials.

Using Team Nutrition Training Grant funds, FNS also awarded Local Wellness Demonstration Project grants to three states in September 2006: California, Iowa and Pennsylvania. These States are conducting case studies to examine selected districts' wellness policies; document the processes used to develop and implement the policies; examine school efforts and resources to implement the policies; identify perceived barriers and obstacles to implementation; and assess changes in the school environment arising from the policies. Final reports are expected March 2010, and will be made available on our Team Nutrition website.

The wellness law specifies that the Department of Agriculture, the Department of Health and Human Services/Centers for Disease Control and Prevention (CDC) and the Department of Education (ED) work together to make information and technical assistance on these policies available, on request, to local and state educational agencies. The three Federal agencies have been working collaboratively to provide technical assistance and examples of local wellness policies on the Team Nutrition website found at http://teamnutrition.usda.gov/Healthy/wellnesspolicy.html

USDA continues to work with CDC, the Department of Education, and other school health related national organizations to provide information to support schools' efforts to promote student wellness. In September 2009, representatives from these groups joined FNS and other experts in child nutrition, education, school wellness, physical activity, and school food service to provide input on updating a key wellness resource: "Changing the Scene---Improving the School Nutrition Environment". The revised resource will retain components designed to assess and build support for healthy school nutrition environments as well as add new resources to help schools implement, monitor and improve their local school wellness policies. As part of the normal review process, States are monitoring LEA compliance with local wellness policies requirements.

Senator John Cornyn

Thank you Mr. Secretary for taking the time to testify before the Senate Agriculture Committee, and I look forward to working with you on the upcoming reauthorization of USDA's Child Nutrition Programs. The Houston Independent School District (HISD) is the 7th largest school district in the nation, and I anticipate working very closely with them on school nutrition standards, menu planning, meal reimbursements, commodity allocations, and overall nutrition education to improve the health of Texas school children. I appreciate this opportunity to ask you a few questions on behalf of the district and the Texas children they educate and feed. I look forward to your reply and appreciate your time and consideration.

1) Mr. Secretary, the Agriculture Committee wrote legislation last year to create uniform national standards for all foods sold in schools. Does the Administration share the goal of a single nationwide nutrition standard?

Answer: As indicated in my testimony, it is critical for USDA to establish improved nutrition standards for school meals, as well as national baseline standards for all food sold in schools, including food sold in the á la carte lines and in vending machines, to ensure that those foods contribute effectively to a healthy diet. The school nutrition environment can have a powerful influence on promoting a healthful diet and lifestyle. While we do not now have the authority to create national baseline standards for all foods sold in school, if given that authority, USDA would work closely with our stakeholders to establish such standards.

2) If so, would the Administration favor phasing in new standards in a manner that allows existing school food supply chains adequate time to respond to changes?

Answer: As part of implementing any new standard, USDA would work closely with our stakeholders to establish reasonable implementation timeframes that allow suppliers and schools to procure foods that meet the standards.

3) Recognizing the nutrition achievements that have already been made by some states, such as Texas, in the absence of nationwide standards, would the Administration favor exempting or otherwise working with such states to make additional improvements to state-level standards?

Answer: We applaud the efforts that a number of States and school districts have already made in this area and recognize that USDA can certainly learn from their best practices. Any baseline standards would be developed through the rulemaking process with assistance from stakeholders.

4) Given the increasing cost of transportation, has the USDA considered incorporating local or regional produce and other foods to support our school children while making an impact on our local and state economies?

Answer: USDA recognizes that there is continuing interest in and advantages to incorporating locally produced food into School Meal Programs. Over the years, USDA has undertaken substantial efforts to promote and encourage the procurement of local agricultural products for use in these programs. The incorporation of local agricultural products in School Meal Programs has three major benefits. First, it provides children with healthy fresh foods to enhance the appeal of school meals. Second, it helps children to better understand the connection between the foods they eat and where those foods come from. Third, it helps support local community development and small local farmers.

USDA first established an initiative to promote Farm to School relationships in 1997 to connect small farms to the school meal programs. The first steps taken in the Farm to School initiative encouraged small farmers to sell fresh fruits and vegetables to schools and encouraged schools to buy produce from small farmers. To assist schools that were interested in beginning Farm to School activities, FNS created two publications that provide tips on how school food service personnel may purchase products from local farmers and that illustrated success stories. The first item, published in 2000, was entitled *Small Farms/School Meals Initiative: a Step-by-Step Guide on How to Bring Small Farms and Local Schools Together.* This publication details how to bring small farms and local schools together to facilitate the purchase of local agricultural products. The second, published in December 2005, was entitled *Eat Smart-Farm Fresh! A Guide to Buying and Serving Locally-Grown Produce in School Meals.* This handbook offers information on procurement and examples of farm to school distribution models, advice on how to find locally-grown food and farmers, menu planning considerations, and strategies for successful implementation.

On September 15, 2009, Agriculture Deputy Secretary Kathleen Merrigan announced a new initiative to better connect children to their food and create opportunities for local farmers to provide their harvest to schools in their communities as part of USDA's "Know Your Farmer, Know Your Food" initiative. A key objective of the initiative is to support local and regional food systems by facilitating linkages between schools and local food producers. As part of this initiative, a team of FNS and Agricultural Marketing Service (AMS) staff, or tactical team, is working with local and state authorities, school districts, farmers and community partners to develop mechanisms to (1) assist schools in accessing local markets; (2) enable food producers to effectively service their local schools; and (3) facilitate communication between interested stakeholders. To assist in the growth of Farm to School activities, the tactical team will:

- Identify and conduct field work in school districts representing varied demographics and characteristics that have developed successful Farm to School programs
- Use the field work information to analyze and assess barriers to effective implementation of successful Farm to School programs and identify trends
- Establish pilot projects to further test a variety of approaches to promote Farm-to-School efforts
- Develop a Farm to School website listing resources, best practice information and guidance to schools that have either not yet started Farm to School activities or would like to expand their existing Farm to School efforts
- Facilitate webinars with interested parties to allow for dissemination of Farm to School barriers and successes.

USDA remains committed to developing and providing our stakeholders with expert technical assistance in the area of local agricultural procurement. We believe that continuing dialogue with our stakeholders and the findings and results of the efforts of the "Know Your Farmer, Know Your Food" initiative will provide us with innovative approaches to encourage local agricultural purchases and Farm to School success.

Senator Robert P. Casey, Jr.

1. I recently launched a tour across Pennsylvania for the exhibit Witnesses to Hunger, a photography project documenting hunger and poverty. This project began at Drexel

University in Philadelphia with 40 women capturing their daily struggle with hunger with digital cameras. In June, I had the honor of bringing this exhibit to Washington. I cannot begin to describe how moved I was to see the photographs taken by these women, and hear their stories. Their bravery and rare courage in sharing the struggles they face to provide a safe, nurturing home for their children will always stay with me. These mothers who brought Witnesses to Hunger to life are a constant reminder that the programs we in Congress advocate for, and the new initiatives we develop, can have a real impact on people's lives. Through my conversations with the women participating in Witnesses to Hunger, I have learned a great deal about the day-to-day aspect of the programs we are discussing. Application to these programs can be overly burdensome for some families. I believe that we need to simplify and modernize the application for these programs. For this reason, I introduced the Paperless Enrollment for School Meals Act, modeled after the Philadelphia pilot program which provided free lunch to all kids in schools that had over 75% of the students eligible for free lunches. I applaud your Department's efforts to enable Direct Certification. I was wondering if you could speak a bit about expanding the idea behind direct certification and illuminate how you envision this idea playing out ten or even twenty years down the road. Also, I'd like to hear your thoughts on how programs such as the Philadelphia paperless enrollment pilot and direct certification of children receiving food stamps to be automatically enrolled in the school lunch program will help work toward the Administration's goal to end childhood hunger by 2015?

Answer: USDA is committed to developing alternatives which improve program access for low-income families and reduce burden for families and schools. Direct certification ensures eligible children are properly and promptly certified for the benefits they are entitled to receive. USDA supports and seeks to expand and improve the direct certification process as it is a highly effective tool that improves access to school meals for needy children, removes the burden from their families of completing and submitting applications and reduces the paperwork burden on schools. Direct certification also supports program integrity by accurately targeting benefits to eligible children.

Increasing use of direct certification will enable schools to reach more eligible children, ensuring that they have access to the nutritious food they need at school for their growth, development, and academic achievement. This will help us reach our goal of eliminating childhood hunger, and will support broader school-based efforts to promote and model healthy food choices and motivate better nutrition and physical activity behaviors for the future.

In continuing to examine additional alternatives to the free and reduced application process, we have contracted with the National Academies' Committee on National Statistics to conduct a review of various data sources including but not limited to the Census Bureau's America Community Survey. We are optimistic that this contract will provide alternatives that are both accurate and cost effective, leveraging both the Census' technical survey expertise and ongoing multimillion dollar investment in nationwide data collection.

The Philadelphia pilot has demonstrated many of the benefits of using a paperless approach in determining program eligibility. We look forward to working with Congress to explore alternatives and anticipate that a number of lessons learned from this model will be instructive as Congress moves forward to identify viable options for determining program eligibility.

2. In your testimony, you mentioned the summer food service program and the need to improve access beyond the 2.2 million children currently served. Do you have ideas as to how to best do this? How do we serve children in rural areas or areas where it is difficult to congregate them at a feeding site?

Answer: USDA has worked extensively over the years to expand access to the Summer Food Service Program, but the results have been modest at best. We believe it is time to explore additional means of reaching children that lose access to critical nutrition assistance when school dismisses for the summer.

USDA welcomes the opportunity to examine additional ways to prevent hunger during the summer months through the use of $85 million that was allocated for summer food demonstration projects in the FY 2010 Agriculture Appropriations Act. We are currently considering and developing a number of innovative nutrition assistance models to test through the pilots and determine which hold the most promise for preventing hunger among children when school is out. We expect that these pilots will include interventions that provide food to children and their families without the need for congregate feeding.

In that regard, a rigorous evaluation of the impacts of these projects is a central component of our plans. When the pilots are established, we will provide Congress with additional descriptive information, and we look forward to sharing the evaluation findings with you when they are ready.

3. You also mentioned facilitating relationships between farms and schools. The issue is finding ways we can better support that connection. What sort of approaches is the Farm to School Tactical Team investigating? The Fay-Penn Economic Development Council in Pennsylvania has developed a locally grown food initiative, and I invite you to examine this concept. What are the biggest barriers to local farm participation in nutrition programs such as school lunch?

Answer: USDA has undertaken numerous initiatives and activities to help support nutrition programming links with small and local agricultural producers. As part of USDA's "Know Your Farmer, Know Your Food" initiative, we have focused on ways to better connect children to their food and create opportunities for local farmers to provide their harvest to schools in their communities.

In 2009, a Farm to School tactical team was established as an outgrowth of USDA's *Know your Farmer, Know Your Food Initiative.* The purpose of the Tactical Team is to support local and regional food systems by facilitating linkages between schools and local food producers. The team is comprised of both Food and Nutrition Service and Agriculture Marketing Service staff who will work with local and state authorities, school districts and administrators, farmers and community partners to develop mechanisms to assist schools in accessing local markets and increasing opportunities to purchase more locally-grown produce; enable food producers to effectively service their local schools; and facilitate communication between interested stakeholders. Among other activities, the team will identify and recruit a range of school districts representing varied demographics and characteristics in which the Team will conduct field work.

Information gathered from the field work will be analyzed to identify trends and barriers to effective implementation of farm to school programs. The Tactical Team will soon begin a series of site visits to further explore farm to school efforts. We will be working with schools and producers to identify ongoing challenges and promising strategies for expanding opportunities for schools to purchase more locally grown foods. We believe the lessons learned by the Tactical Team will allow us to expand our ongoing technical assistance in support of farm to school efforts, as well as inform future policy discussions between USDA and the Congress.

In response to a request contained in the Consolidated Appropriations Act of 2008 (P.L. 110-161), USDA submitted a report to Congress entitled *Report on Enhancement of Local Procurement.* That report outlined federal procurement practices that may present barriers to local procurement. Some of these barriers represent actual current regulatory, administrative or statutory requirements. However, there are also barriers that continue to exist with regard to lack of interest on the part of school food authorities despite efforts to encourage local procurements. In general, barriers include: costs; lack of information about or access to local producers; procurement requirements placed on schools by local, State and federal laws and regulations; additional workload imposed on schools when contracting with numerous smaller vendors; food safety and quality concerns; transportation issues; lack of information made available to farmers regarding sales to schools as well as a lack of interest on the part of farmers in pursuing such sales; lack of self-preparation facilities at schools; and lack of storage equipment for agricultural products at schools.

Senator Sherrod Brown

1. By some estimates, 1.5 million children eligible for the school lunch and breakfast program are slipping through the cracks. And as we saw in today's papers, 1 out of 5 households with children were food insecure at some point last year. It's unacceptable that so many children in a country as prosperous as ours aren't getting the meals they need to succeed.

   What is USDA working on to improve these numbers? What role can increased use of direct certification play in making sure that the children who need these meals are actually getting them?

Answer: With regard to the food insecurity figures you cite, the fundamental cause of domestic food insecurity and hunger is household poverty--the lack of adequate resources to address basic needs such as food, shelter and health care. The Administration has pursued an aggressive program of actions to address poverty through a broad expansion of economic opportunity. The American Recovery and Reinvestment Act (ARRA) is projected to create or save about 3.5 million jobs while making long-term investments in health care, education, energy, and infrastructure, providing tax relief for working families and working to promote affordable housing and vibrant neighborhoods and communities. ARRA strengthened USDA's nutrition assistance programs with a substantial increase in Supplemental Nutrition Assistance Program (SNAP) benefits and TEFAP funding, and infrastructure investments in all of the major programs. Most SNAP households of four received an $80 increase in their monthly benefits starting in April.

With regard to school meals, we believe more effective direct certification is a vital tool to increase the number of children certified as eligible for free lunches and breakfasts. The recent USDA report to Congress on direct certification status, which was mandated by the 2008 Farm Bill, found that a number of otherwise eligible children are still not being directly certified and may not be receiving free meals. The first report for School Year 2007-2008 found 67 percent of school districts conducting direct certification; that number rose to 78 percent of school districts in the School Year 2008-2009 report. Both reports included States' best practices for implementing direct certification and addressed the most effective methods to enhance access and streamline the certification process.

The best practices identified for direct certification included:
- improving identification of additional children who may be receiving SNAP benefits;
- supporting technological enhancements by providing grant funds;
- simplifying certification policy related to household determinations for categorical eligibility purposes, including through direct certification; and
- increasing the frequency of direct certification inquiries in order to certify children who may become eligible for SNAP during the school year.

Other efforts we have encouraged to increase participation include:
- encouraging schools to reach out to families whose circumstances may change during the school year by reminding them that they may apply for benefits at any time;
- working with the Department of Labor to have officials in unemployment offices make their clients aware of the availability of free and reduced price school meals; and
- supporting efforts to streamline the application process through on-line applications especially "one-stop shopping" that allows families to apply for multiple benefits at the same time.

2. I've been happy to hear of your support for direct certification. However, I am concerned that in USDA's most recent report on the states direct certification performance, as many as 3.5 million children who could have been directly certified were not, and a good portion of those children may have missed out completely on free meals.

   I appreciate the efforts made this year to improve direct certification rates and I am hopeful that we take further steps in the child nutrition reauthorization legislation. But in the meantime, what is USDA is doing to improve state performance? Are you meeting with the 48 states that don't yet directly certify 95 percent of the children in household receiving food stamp benefits? What support are you providing to share best practices and support improvement efforts?

Answer: We are disseminating the results of the annual report on direct certification performance to all States, and using the descriptive information it includes on direct certification systems across the country to promote best practices across states that could assist with making direct certification more effective. We are also preparing to use the Direct Certification grant funds provided by the Fiscal Year 2010 Agriculture Appropriations Act to promote good performance among all states that are not adequately implementing direct certification procedures. We are looking at best practices reported by the most successful states to determine how to structure the grant solicitation as well as our technical assistance efforts. For example, our experience to date suggests that periodic, rather than annual matches, and Web-based lookup systems which allow schools to verify the status of individual students, can improve the effectiveness of direct certification. We will continue to assist States in their development of direct certification systems tailored to their particular circumstances and aimed at bringing more eligible children into the child nutrition programs.

3. The school lunch and breakfast programs are an indispensable resource for the millions of children in this country who need a healthy breakfast and lunch each school day. I think we all agree that we want to make it easier for low-income children to get access to these meals. The Hunger Free Schools Act, a bill that I introduced with Senators Casey and Bennet, includes a number of provisions that would take steps to ensure that poor children are automatically enrolled for free school meals.

   One of the provisions in the bill would make it easier for schools in high poverty areas to serve free meals to all children who attend their schools. At Harvey Rice Elementary in Cleveland, 99 percent of the students qualify for free or reduced price meals—and it's just one of the hundreds of schools in Ohio where over 90 percent of the students are eligible for free or reduced lunch. We know that the kids in these neighborhoods are overwhelmingly poor. We know that these schools face extraordinary challenges. I think that we should make it easier for these schools to serve their students by eliminating the application and paperwork processes that are fundamentally a waste of time.

   Our bill includes an option that would allow schools serving high-poverty areas to offer free meals to all students and be reimbursed based on direct certification rates.

   By our measure, this bill would allow thousands of schools serving the highest share of poor children to be truly hunger free schools — meaning they could serve free breakfasts and lunches to all their students. Can you tell us what you think about this concept

Answer: USDA is committed to developing alternatives which improve program access for low-income families and reduce burden for schools, including options which facilitate the service of all meals free in very low income areas. To that end, we have an effort underway to examine additional alternatives to the free and reduced applications.

We have contracted with the National Academies' Committee on National Statistics to conduct a review of various data sources including but not limited to the Census Bureau's America Community Survey and direct certification data. We are optimistic that this contract will provide alternatives that are both accurate and cost effective, leveraging both the Census' technical survey expertise and ongoing multimillion dollar investment in nationwide data collection. Schools in needy areas of Ohio and throughout the Nation would be expected to benefit from these alternatives.

These efforts, and continuing to increase the use of direct certification, will enable schools to reach more eligible children, which will help us reach our goal of eliminating childhood hunger.

Senator Kirsten Gillibrand

1) I am pleased to see the administration's commitment to ending childhood hunger by 2015. However, in addition to ensuring that children are able to get a sufficient quantity of food, I am also particularly interested in ensuring that that food is of the highest quality. I will continue to be an advocate for increased funding for the bill in order to provide our children have access to more fresh fruits, vegetables, whole grains and unprocessed meats. Can you please comment on initiatives the USDA is taking to include more whole foods in the Child Nutrition Programs, and what steps the committee can take to build on those efforts? Can you also please talk about what actions the USDA is taking to help schools increase transparency about what items are currently being served to students, so parents can be more fully involved in the menu planning and development?

Answer: USDA has taken a number of steps to improve the nutritional content of meals served in the Child Nutrition Programs, and to promote the use of whole foods such as fruits, vegetables and whole grains. First and foremost, we commissioned the National Academies Institute of Medicine (IOM) to convene an expert panel to provide recommendations to update the meal patterns and nutrition standards for the National School Lunch Program (NSLP) and School Breakfast Program (SBP).

The panel released its report in October, including science-based recommendations addressing new nutrient targets and meal requirements for school meals, implementation and monitoring of the new requirements, and evaluation and research activities to guide future improvement. One key recommendation in the IOM report is to increase the amount and variety of fruits, vegetables and whole grains in school meals. USDA will develop a proposed rule to update the school meal programs based on IOM's final report, and provide stakeholders and the public ample opportunity for comment and input before issuing a final rule to implement the proposed changes. While rulemaking is underway, USDA will continue to provide practical guidance and technical assistance to schools to help them increase the availability of fruits, vegetables, whole grains, and low-fat/fat-free dairy products in the lunch and breakfast menus. It's worth noting that the IOM report found that increased federal support is needed for schools to comply with these new standards.

In the meantime we continue to make improvements to ensure that USDA Foods contribute to diets that align with the *Dietary Guidelines for Americans*. Because of the significant improvements we have made in these foods, they are well-suited to support the IOM recommendations addressing new nutrient targets and meal requirements for school meals. USDA recently worked with the food industry to produce low sodium canned vegetables for schools and other outlets, although such products are not yet commercially available. We continue to purchase other lower salt items such as reduced sodium turkey ham and chicken fajitas, and we have reduced the salt limit for mozzarella cheese. We have also increased whole grain offerings. In addition to whole-grain foods such as brown rice, rolled oats, whole-wheat flour, whole-grain dry kernel corn, and parboiled brown rice, we are now buying whole-grain rotini, spaghetti, macaroni, pancakes, and tortillas for schools.

With regard to transparency, more information must be provided to parents on the performance of schools so that they can make choices for their children, and take action to help schools improve. We have recommended that reauthorization action should include requirements for schools to share information about the content of their meals with the families that rely upon them.

Schools can also take a leadership role in helping students learn to make healthier eating and active lifestyle choices. The HealthierUS School Challenge (HUSSC) was established in 2004 to recognize elementary schools that are creating healthier school environments by promoting good nutrition and physical activity. Four levels of superior performance are awarded: Bronze, Silver, Gold, and Gold of Distinction. More than 600 schools that have earned HUSSC awards are serving healthy meals, providing healthier competitive foods, and promoting physical activity and nutrition education. They are the best of the best and should be proud and recognized by their communities for doing right by our children. On October 21, at a national school lunch event hosted by the First Lady, we announced the expansion of the HUSSC to include secondary schools. For the first time, middle schools and high schools are eligible to take the Challenge and receive an award for their efforts in providing a healthier school environment for their students. The criteria for all schools can be found on our Team Nutrition web page: www.teamnutrition.usda.gov/.

2) In an effort to combat the obesity epidemic, there are some commonsense measures we can take to improve the nutritional quality of the foods our children are consuming at school. Following the example of school districts like New York City, simple administrative guidelines setting reasonable standards on vending machines and a la carte items can ensure our children are eating healthy and nutritious meals at school. What sort of standards would you put into place if given the authority by S.934, the Child Nutrition Promotion and School Lunch Protection Act?

Answer: We must do everything we can to improve the nutritional quality of school meals and the health of the school environment. While improved school meals are critical to our nutrition and obesity prevention goals, the challenges of helping kids stay healthy extend beyond reimbursable school meals. Children are subject to innumerable influences in their environment. As they develop preferences and practices that will last a lifetime, their choices are shaped by their surroundings—at home, in school, and in their wider community. The school nutrition environment is a powerful influence in this regard. Accordingly, the Administration recommends setting higher standards for all foods sold in school, and related policies and programs to ensure that the school environment is a positive influence on children's diets, their physical activity choices, and their health.

The National School Lunch Program regulations prohibit the sale of foods of minimal nutritional value, such as carbonated beverages, hard candy and water ices, in the foodservice area during meal periods. Beyond this, USDA does not have authority to regulate the sale of other foods available to students outside of the school meal programs during the regular meal service (competitive foods). State agencies or local school districts may choose to set their own requirements for competitive foods.

If given authority to regulate all foods available to students outside of the school meal programs, USDA would convene a group of key stakeholders to seek their input. Subsequently, based on statutory direction, stakeholders' input and science-based nutrition standards we would issue a proposed regulation that would establish baseline nutrition standards to define the foods that would be acceptable outside of the school meal programs. Stakeholders and the public would have ample opportunity to comment on any proposed regulation.

This approach reflects the critical role that the school can play in the effort to promote healthful lifestyles and combat obesity.

3) Studies have shown that a good breakfast promotes academic achievement and helps children maintain a healthy weight. However, school breakfast remains the forgotten meal, with participation far lower than the lunch program. Along with my colleagues Senator Kohl and Senator Feingold, I have worked on legislation that would give school districts grants to encourage the development of innovative new ways of delivering school meals to ensure that this vital component of the program is properly utilized. Can you please comment on this proposal?

Answer: We know that eating a good breakfast can have a positive effect on a child's ability to learn and his or her academic performance. For more than thirty years, the School Breakfast Program (SBP) has played an important role in Federal, State and local efforts to advance children's health and nutrition by offering students a healthful breakfast option in the schools where it operates.

The Department has partnered with program advocates to develop several projects to promote the SBP. We recently broadcast a webinar on SBP resources and success stories and have posted that on our public website. In addition, we have developed a SBP Toolkit designed to be an online resource to help promote and expand the SBP as a way of supporting positive nutrition outcomes for children. These resources are designed to be customized for use by schools and other stakeholders. Information sheets, letters, marketing materials and PowerPoint files may be modified and used by schools and other stakeholders interested in helping more students benefit from the SBP.

USDA continues to expand efforts to enroll more schools in the program and to increase student participation. A variety of factors influence school and student participation in the SBP, including the hours of operation of the breakfast program, staff availability for the preparation and service of breakfast, and other challenges. However, schools are finding innovative ways to provide access to breakfast for more students—ways that fit the particular needs of the student body. For example, some schools serve breakfast on the bus, grab-'n'-go breakfast, breakfast in the classroom or after first period. We applaud and support these efforts.

Although USDA worked extensively on outreach and implementation of an earlier set of SBP Start-up Grants, these grants, in general, were not an effective means of expand the SBP. Nonetheless, USDA remains committed to working with Congress on innovative ways to increase participation in this vital program.

4) The National School Lunch Program still relies primarily on inefficient paper forms for determining eligibility for free and reduced price meals. Labyrinthine paperwork should never be a barrier to children having access to the meals they deserve. Can you please comment on the Hunger Free Schools Act, which would use data from other benefit programs to automatically certify students for the school meal programs, as well as allow certain districts to use census data and other demographic information to administer their school meal programs?

Answer: USDA is committed to developing alternatives which improve program access for low-income families and reduce burden for schools. We look forward to working with Congress to explore alternatives which capture these benefits and also address the concerns regarding the accuracy and cost efficiency of this model.

As part of our ongoing effort to explore and develop additional alternatives to paper-based free and reduced-price meal application process, we have contracted with the National Academies' Committee on National Statistics to conduct a review of various data sources including but not limited to Census' America Community Survey. We are optimistic that this contract will provide alternatives that are both accurate and cost effective, leveraging both the Census' technical survey expertise and ongoing multimillion dollar investment in nationwide data collection.

We look forward to working with Congress on these issues during the Child Nutrition reauthorization process.

5) Feeding programs across the nation have come to depend on the market clearing federal commodity programs for a significant portion of their school meal budget. However, certain products retain formulations that do not further the need to provide appropriately low-fat, low-sugar, low-sodium products to our programs. Can you please comment on the appropriateness of setting FNS's guidelines for the school meal programs as the nutritional baseline for products being purchased by the USDA's commodity programs? The USDA is a massive purchaser of products and can use its clout to positively influence the formulation of products nationally.

Answer: We continue to make improvements to ensure that USDA Foods contribute to diets that align with the "*Dietary Guidelines for Americans*." Because of the significant improvements we have made in these foods, they are well-suited to support the IOM recommendations addressing new nutrient targets and meal requirements for school meals.

We agree that USDA purchases can influence industry to make more healthful options available; indeed, this has already taken place. We required canned fruit to be packed in light syrup, water, or natural juices twenty years ago when the industry only packed in heavy syrup. Now fruit packed in more healthful mediums is commonly available. USDA recently worked with the industry to produce low sodium (140 milligrams or less per ½ cup serving) canned vegetables for schools and other outlets, although such products are not yet commercially available. We continue to purchase other lower salt items such as reduced sodium turkey ham and chicken fajitas, and we have reduced the salt limit for mozzarella cheese.

We have also increased whole grain offerings. In addition to whole-grain foods such as brown rice, rolled oats, whole-wheat flour, whole-grain dry kernel corn, and parboiled brown rice, we are now buying whole-grain rotini, spaghetti, macaroni, pancakes, and tortillas for schools. Since 1992, USDA has offered schools many low-fat and reduced-fat ordering options for beef, poultry, and cheese. For example, USDA offers a 95 percent lean beef patty, lower-fat turkey taco filling, 97 percent lean ham, 95 percent lean turkey ham, diced chicken, and several types of reduced-fat cheeses. Additionally, trans fats have been eliminated from frozen potato products, and a fat free potato wedge is being offered to schools.

Schools have a choice in what USDA Foods they order, and these foods comprise only about 15-20 percent of food served through the National School Lunch Program. Although we continue to strive to offer schools a wide variety of healthful products—not all schools take advantage of the various options available to them. Nevertheless, we will continue to pursue healthful options, such as lower fat, fat-free, salt-free, and sugar-free products, that are palatable to school children, and suit the needs of the school foodservice community.

6) New York State remains a high-cost state that is chronically underfunded in programs that use the federal poverty line as a metric for eligibility. New York State gets back 79 cents per dollar it sends to Washington D.C. Especially in our downstate communities surrounding New York City, the federal poverty line leaves many needy families out of the vital School Lunch Program.

   I have introduced legislation that would use HUD's Fair Market Rent as a means to designate counties across the United States as high-cost, and merge the free and reduced categories into one free category those areas. This would expand the targeted treatment states like Alaska and Hawaii already receive. Can you please comment on this idea?

Answer: Increasing the income eligibility limit for free meals so that children would not have to pay the "reduced-price" meal fee would decrease complexity of certification and meal claiming, and lower costs for families with students currently receiving reduced-price meals. However, even if done only in very low-income areas, this proposal would significantly increase costs, largely by providing funding for meals that children are already consuming, and without ensuring commensurate improvement in the meals served to children.

7) We know that the first five years of life are critical for brain development and establishing later success in life. Good nutrition is absolutely key for young children, and many infants and toddlers in New York and across the country spend a considerable

portion of their day in child care settings. What does USDA think about the importance of Child and Adult Care Feeding Program to ensuring that these children get a good start? What are USDA's plans to ensure that Child and Adult Care Feeding Program provides the most support to as many children and providers given the increase in childhood hunger?

Answer: USDA understands the importance of good nutrition during a child's first five years of life. We have contracted with the Institute of Medicine to convene a panel of experts who will review the Child and Adult Care Food Program (CACFP) meal patterns and make recommendations for improving the meal requirements to ensure they provide adequate nutrition to children in child care settings.

Additionally, Congress provided $8 million in funding for Child Care Wellness grants, to be distributed beginning FY 2010. These grants will be awarded to State agencies for activities that improve the health and nutrition environments of child care facilities participating in CACFP. States will be required to use a minimum of fifty percent of those grant funds to provide sub-grants to local CACFP institutions. We think the improved meal requirements, wellness grants and ongoing nutrition education, and reimbursements for meals served in the CACFP will go a long way in helping child care facilities ensure children in their care get the healthiest start possible.

8) Given the important role that individual districts have played in creating higher standards for the School Meals Program, I strongly support maintaining these districts' ability to set standards that are higher than the national standard. I would oppose any federal standards which preempt more stringent local standards. What are your thoughts on this issue?

Answer: As indicated in my testimony, setting national baseline nutrition standards for all foods sold in schools would support the Department's efforts to create a positive school nutrition environment that helps children develop healthful eating habits. We are pleased by the initiative shown by individual districts. We understand your concerns and will take it under consideration if we are provided the authority to establish national standards. Any baseline standards would be developed through the rulemaking process with assistance from stakeholders.

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